

Final Environmental Impact Report
SCH No. 2004021002
Volume V of V - Appendices

Volume 5 Part 2

LANDMARK VILLAGE

Prepared By:



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General Plan Amendment No. PA00-196
Sub Plan Amendment No. LP00-197
Specific Plan Amendment No. SP00-198
Vesting Tentative Tract Map No. 53108
SEA Conditional Use Permit No. RCUP200500112
Oak Tree Permit No. OTP00-196
Off-Site Materials Transport Approval No. CUP00-196
Conditional Use Permit (Off-Site Grading) CUP00-196

**FINAL
ENVIRONMENTAL IMPACT REPORT
for
LANDMARK VILLAGE**

SCH No. 2004021002

**Volume V of V
Appendices**

Prepared for:

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November 2007

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APPENDIX C

Air Quality

SANTA CLARITA SUBREGIONAL ANALYSIS

NOVEMBER 2004

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

GOVERNING BOARD

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Speaker of the Assembly Appointee

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EXECUTIVE SUMMARY

Background on Subregional Analysis

The overall blueprint for attainment strategy in the greater South Coast basin is the Air Quality Management Plan (AQMP). The AQMP assesses and addresses regional air quality as a macrocosm. Since 2002, as part of SCAQMD's ongoing Environmental Justice program, the SCAQMD Governing Board has also asked staff to carry out one or more "subregional analyses" each year, as "mini-AQMP" microcosms.

A subregional analysis seeks to identify disproportionate air quality impacts in a specific geographic area, and if found, to address and mitigate these impacts. Thus far, the following subregional analyses have been requested by the Board, all involving potentially disproportionate exposure to unhealthful emissions: Mira Loma (concern: diesel exhaust from large clusters of truck warehouse facilities); the Alameda Corridor (concern: diesel exhaust from port operations, the freight rail expressway, associated rail yards, and on-road trucks); and in this report, the Santa Clarita Valley (concern: transported ozone and potential increases in fugitive dust and diesel exhaust emissions stemming from proposed aggregate mining and gravel hauling operations).

In 2003, SCAQMD's Santa Clarita Valley monitoring station recorded the highest official 1-hour ozone reading in Los Angeles county (a maximum concentration of 0.194 parts per million [ppm]). Ozone concentrations in Santa Clarita exceeded the federal 1- and 8-hour standards of 0.12 and 0.08 ppm on 35 and 69 days respectively.

In the spring of 2004, the SCAQMD Governing Board directed that the District provide an expanded analysis of subregional air quality, beyond that presented in the AQMP, to examine and assess several air quality issues confronting the Santa Clarita Valley. In response to this direction, an analysis has been conducted to discuss the observed air quality, the contributing factors to recent trends and to assess the roles of local emissions and pollution transport in relationship to the observations. In addition, the analysis attempts to characterize the potential impacts of development in both the residential sector and in the industrial sector as represented by the development of the Soledad Canyon Sand and Gravel Mining Project (Cemex/Transit Mixed Concrete, Inc. [Cemex/TMC]). The results of the analysis are grouped into three categories: observed ambient air quality (ozone and PM10/PM2.5), simulated ozone and PM10 impacts from future development of available land parcels in the valley, and potential toxic risk from diesel soot emissions associated with the in-situ mining and gravel hauling operations from the Cemex/TMC project.

Ozone and PM10 Air Quality (Sections 2 and 3):

- Santa Clarita does not meet the federal and California ozone air quality standards.

- The recent increase in the number of days exceeding the federal 1-hour ozone standard has been impacted mostly by weather and the movement of the monitoring station location (the old site was unsuitably impacted by local emissions);
- The city can experience a 50 part per billion (ppb) gradient of ozone concentrations from west to east on smoggy days;
- The highest PM10 concentrations in the Santa Clarita Valley are observed in the City of Santa Clarita near the Interstate 5 (I5) and State Route 14/Antelope Valley (SR-14) freeways;
- Transport from the San Fernando Valley and Los Angeles dominates both local ozone and particulate air quality;
- Santa Clarita emissions contribute about 2 percent to local ozone impact;
- Local particulate emissions contribute about 10 percent to the annual average observed PM10 concentration;
- Weekend ozone concentrations under average wind transport conditions are approximately 23 percent higher than weekdays; and
- Santa Clarita meets federal PM10 standards but exceeds the more restrictive California standard.

Impacts from Future Development (Sections 3, 4 and 5)

- Doubling of motor vehicle emissions in the city of Santa Clarita will have a nominal impact to local PM10 and no impact to local ozone;
- When simultaneous 25-year build-out of all recorded, pending and approved land parcels in the city and county portions of the valley is assumed, simulated annual PM10 concentrations are projected to increase up to 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$);
- The maximum regional annual average PM10 impact is projected to occur near Newhall Ranch;
- The annual average regional impact due to the development of the Cemex/TMC facility is projected to result in an increase of up to $3 \mu\text{g}/\text{m}^3$, in the immediate area surrounding the mine;
- A focus point source analysis of the Cemex/TMC mine projected an annual PM10 impact of up to $16 \mu\text{g}/\text{m}^3$ (at the fence line of the facility); and
- Future development would not cause violations of the federal annual average PM10 standard but could cause possible violations of the state standard.

Toxic Risk Analyses (Section 6)

- The MATES II regional toxic risk study estimated an average risk of 500 in one million for the City of Santa Clarita;
- By comparison, the average toxic risk for the South Coast Air Basin (Basin) is approximately 1,400 in one million;
- In general, simulations using a Gaussian model in the Basin are conducted using the urban meteorological assumption. Due to its unique topography, the Santa Clarita Valley was simulated using both the urban and rural meteorological assumptions to bound the analysis;
- Model-simulated maximum risk to the city of Santa Clarita from diesel emissions associated with mining and hauling operations from the Cemex/TMC project ranges from 10 to 25 in one million, dependent upon the meteorological profile: urban or rural, respectively;
- The northeast portion of the city adjacent to the SR-14 and Soledad Canyon Road split would experience the greatest impact; and
- The maximum risk to a sensitive receptor (school) ranges from 7 to 20 in one million, dependent upon the meteorological profile: urban or rural, respectively.

The City of Santa Clarita through its air quality element has instituted many air pollution mitigation measures and is considering additional options. This analysis concludes by providing selected potential mitigation measures (Section 7) that address fugitive dust issues and emissions from diesel mobile sources.

1.0 INTRODUCTION

At its August 2003 meeting; the Governing Board of the South Coast Air Quality Management District (District) adopted the 2003 revision to the Air Quality Management Plan (AQMP) for the South Coast Air Basin (Basin). The 2003 AQMP, which has since been forwarded to the California Air Resources Board (CARB), and approved for inclusion in the California State Implementation Plan (SIP), is the region's blueprint towards clean air. The AQMP provides regional characterization of the air quality problem and proposes the development of specific emissions control measures and rule implementation schedules to meet clean air goals. While the AQMP details the road map to regional attainment of all air quality standards, it is not directly focused on the subregional or localized air quality impacts that affect individual communities.

The City of Santa Clarita has requested that the District conduct an expanded analysis of subregional air quality, beyond that presented in the AQMP, to exam and assess several air quality issues confronting both the city and its sphere of influence, the Santa Clarita Valley. The city and valley are both rapidly developing. The community is developing a subregional plan "One Valley, One Vision," which defines the goals of growth and development for the incorporated and unincorporated cities of the valley while maintaining a high quality of life. As part of this planning effort, the city has requested that the District provide answers to key issues that are intimate to the local area. These included:

- Characterizing and evaluating the observed ozone and particulate air quality
 - trends;
 - impact of local emissions; and
 - and what is termed the "weekend effect".
- Evaluating the impact of potential development growth on air quality
 - through increased mobile source emissions; and
 - by simulating the valley build-out .
- Evaluating the impact of proposed Cemex/TMC mining operations.
- Providing potential mitigation measures.

2.0 BACKGROUND

The city of Santa Clarita (Figure 2-1) is located approximately 35 miles northwest of central Los Angeles, with its southern boundary abutting the northern portion of the San Fernando Pass. The majority of the city resides between Interstate 5 and State Routes 126 and 14. The size of the city accounts for roughly 25 percent of the 200-square mile Santa Clarita Valley.

The estimated population of Santa Clarita in 2003 was approximately 163,000 with an estimated total population in the Santa Clarita Valley of 172,000. The population of the city has grown over 35 percent since 1990 with 75 percent of the population residing in single family dwellings. The population growth rate has been complemented with substantial growth in housing, within the incorporated boundaries of the city and on adjacent developed land in both Los Angeles and Ventura counties.

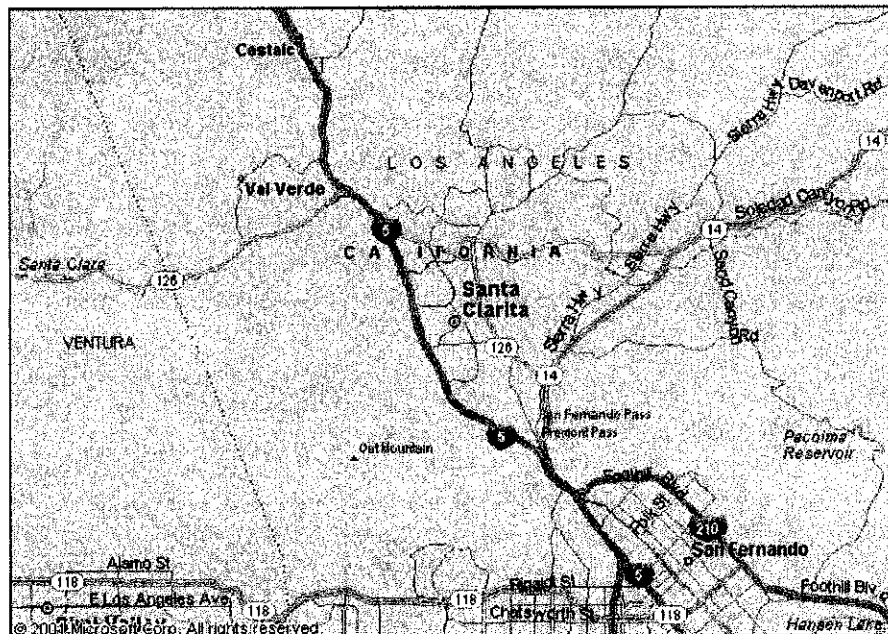


FIGURE 2-1

Santa Clarita and Neighboring Communities

While residents commuting to the San Fernando Valley and Central Los Angeles account for a large percentage of the work force, the Santa Clarita Valley retains more than 30,000 jobs. Commuting to the Santa Clarita Valley represents a growing contribution to traffic and emissions.

2.1 Meteorological Profile

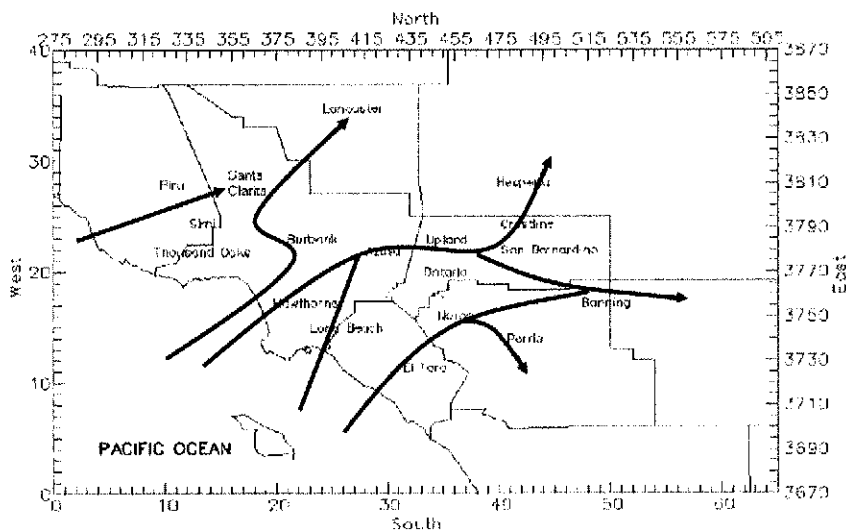
During the 1997 Southern California Ozone Study (SCOS97, conducted by a partnership of air districts, CARB and U.S. EPA), extensive measurements of meteorological and air quality data were taken to help characterize the pollutant build-up and transport processes that take place in the Basin. The August 4-7, 1997 meteorological episode captured the build-up of an ozone episode and the development of a coastal eddy that resulted in transport of the polluted air mass to the Santa Clarita Valley over successive days. The episode was simulated as part of the Basin ozone attainment demonstration for the 2003 Air Quality Management Plan. In later sections of this report, these simulations are used to demonstrate the relative impact of transport to the Santa Clarita air quality problem due to emissions in the valley and in the upwind emissions source areas.

The following sections briefly describe the observed wind flow and inversion characteristics that uniquely impact the Santa Clarita Valley.

2.1.1 Wind Flow

The meteorological profile of the Santa Clarita Valley is dominated by the diurnal sea breeze wind circulation that is characteristic of Southern California. Daytime wind transport into the Santa Clarita Valley occurs along two primary routes: from the south through the Newhall pass, and from the west following the Santa Clara River (Figure 2-2). The thermally driven southwesterly wind flow exits the valley mainly through the eastern canyons on a traverse towards the Antelope Valley. A smaller percentage of the wind flow into the Santa Clarita Valley is channeled up the side canyons which are generally north-south in orientation. Average wind speeds during the afternoon range between 5 and 10 miles per hour. At night, weak drainage flow from the surrounding mountains collects along the Santa Clara River bed and is transported westward towards the coast.

Seasonally, the sea breeze is strongest during the spring and summer months. The typical flow pattern into the valley is augmented by region-wide southerly flow that accompanies the development of coastal eddies in the Southern California bight. The formation of coastal eddies occurs approximately 15 percent of the year. When the eddy is established, it promotes regional transport from the majority of the air pollution sources in the coastal plain. Less frequent, but well pronounced in the Santa Clarita Valley, are the periodic Santa Ana northerly winds which are routinely characterized by wind gusts in excess of 30 mph.



Prevailing Wind Transport to the Mojave Desert

Table 2-1 summarizes the frequency of occurrence of different daytime transport regimes to Santa Clarita. In general, average transport, which is characterized by a moderate-to-strong sea breeze through the Newhall Pass, occurs two-thirds of all days. In contrast, Santa Clarita is mostly impacted from local emissions under calm winds and weak offshore flow which occurs less than ten percent of all days.

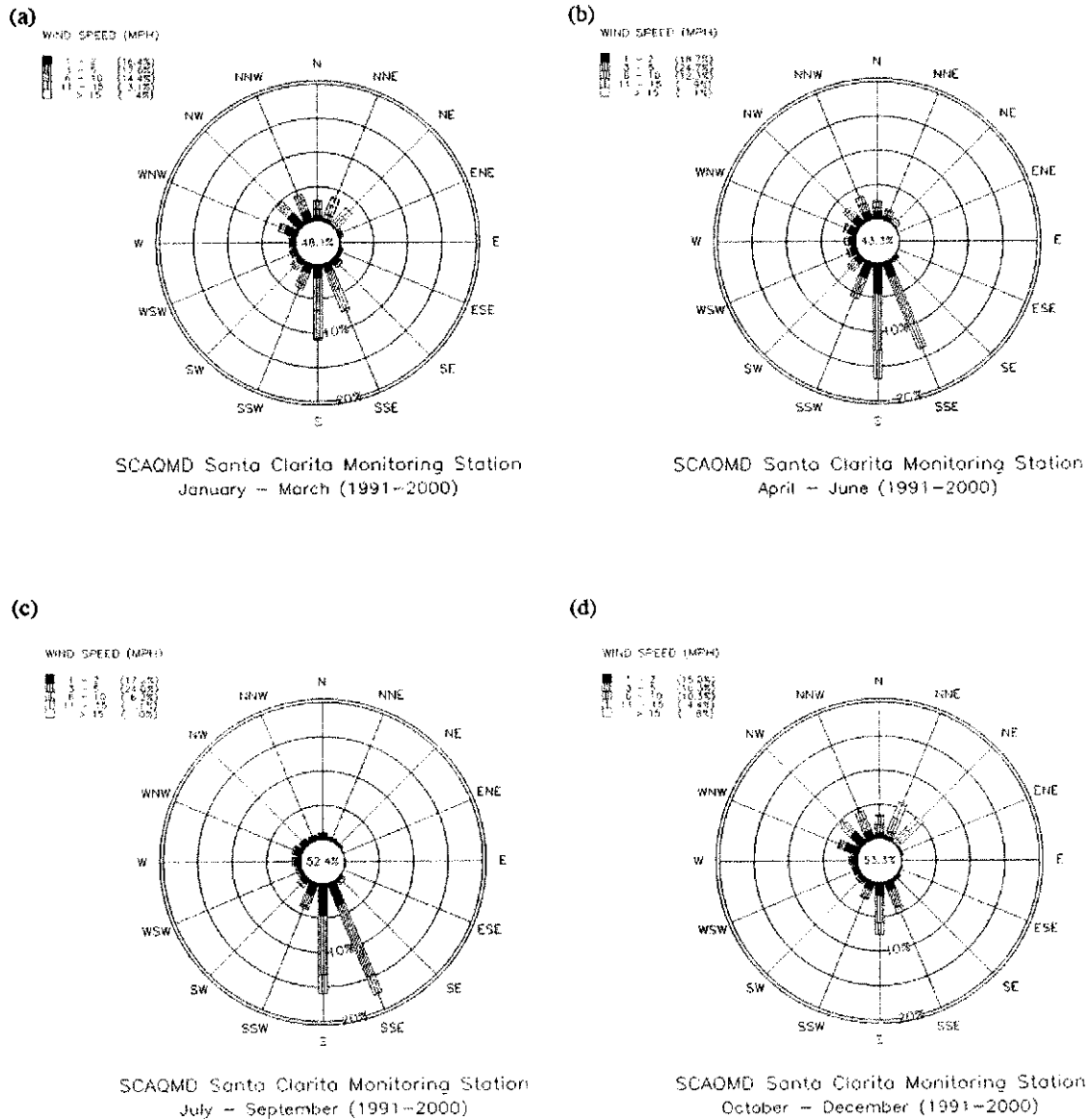


FIGURE 2-3

Hourly Wind Rose for Santa Clarita (1991-2000):
(a) Winter, (b) Spring, (c) Summer, (d) Fall

TABLE 2-1

Frequency and Strength of Daytime Wind Transport to Santa Clarita

Transport Regime	Frequency of Days	Characteristics
Local	6	Calm winds or weak offshore flow
Weak	20	Light winds onshore
Average	66	Moderate to strong sea breeze through Newhall pass and Santa Clara River Valley
Overwhelming	8	Strong Catalina eddy or an approaching storm system

2.1.2 Inversion Characteristics and Mixing

The elevation of the Santa Clarita Valley varies from just over 1000 feet to about 1700 feet above mean sea level (msl) in the eastern portion of the city. The base of the morning coastal inversion layer typically resides within a layer approximately 1000 and 3000 feet above msl with a median height of approximately 1200 feet msl. On many days, the coastal and San Fernando portions of the Basin reside in the marine layer while Santa Clarita is above the inversion base in the stable air within the inversion layer. When the inversion is lower than the elevation of the valley, Santa Clarita will take on the climatic characteristics of the high desert. These include limited cloud cover from the marine layer, low humidity and a rapid warming of daytime temperatures. Vertical mixing of the atmosphere under these conditions is limited in the pre-dawn and early morning hours due to the very stable atmosphere. Higher levels of tailpipe emissions are trapped close to the ground but the rapid heating of the atmosphere after dawn limits the amount of stagnation, acting to disperse morning pollution vertically.

On days when the height of the base of the inversion layer is approximately equal to or greater than the elevation of the valley, a modified marine air climatic profile is observed in Santa Clarita. This will often include clouds or fog, higher humidity and slower rise in daytime temperature. Vertical mixing of the atmosphere will readily disperse ground level emissions; however, the extent of mixing will be determined by the inversion base height above mean sea level relative to the terrain elevation. As a consequence, on days when the morning inversion is elevated over Santa Clarita, the mixed layer, or area of the atmosphere where pollutants readily disperse, can actually be shallower than over the San Fernando Valley and coastal plain. These conditions often accompany the development of a coastal eddy and enhanced wind transport into the valley.

As the air over Southern California heats during the day, vertical mixing in the coastal plain and San Fernando Valley will typically reach between 3000 and 5000

feet. Developing ozone and particulate air pollution caught in the mixed layer is transported with the winds towards the Santa Clarita Valley. The pollutant-laden air mass extends high enough in the atmosphere to easily move through the Newhall Pass into the valley proper. The transported pollutant air mass typically retains the marine or coastal climatic characteristics and is several degrees cooler in temperature than the air it is displacing in the Santa Clarita Valley. The cooler pollutant-laden air tends to hug the ground creating a temperature contrast between the pollutant air mass and the warmer air above in the mixed layer. As a result, the movement of the polluted air mass into Santa Clarita acts to regenerate a low-level inversion whereby the transported pollutants are concentrated in a shallow layer.

On days when Southern California experiences extreme heat, the inversion layer is broken and vertical mixing of the atmosphere becomes unlimited. Under this condition transport into the Santa Clarita Valley is limited and pollutant levels are characteristically low in the area.

2.2 Air Quality Profile

Any assessment of the Santa Clarita air quality profile must begin with an assessment of the trend of air pollution in the South Coast Air Basin. In general, the region is most greatly impacted by ground-level ozone. Particulate matter, separated into a fine mode (PM_{2.5} - aerodynamic diameter less than or equal to 2.5 microns) and a coarse mode (PM₁₀ - aerodynamic diameter of 10 microns or smaller, including PM_{2.5}), is the second major contributing pollutant to Basin air quality. To a lesser extent, and more restricted in geographical impact is carbon monoxide, a third pollutant of concern.

The federal air quality pollutant standard attainment designations characterize the Basin as a region. The Basin is classified non-attainment for ozone, PM₁₀, and carbon monoxide. Each of these pollutants impacts the health of the Basin population through short-term acute exposure and long term chronic impacts. On a sub-regional scale, Santa Clarita exceeds only the federal standard for ozone.

Ozone is an oxidant that readily reacts with tissue in the respiratory tract; primarily the cilia in the bronchi and the alveoli in the lungs. Irritation, combined with inflammation caused by exposure leads to scarring of the alveoli cell walls and reduced pulmonary function with repeated exposure over time. Particulates, especially the fine portion, are easily inhaled and deeply penetrate the respiratory tract, causing irritation and inflammation. The particulates often serve as platforms for toxic materials and are associated with increases in mortality rates. Asthmatics, the, very young, the aged and people with pre-existing chronic respiratory ailments, are among the susceptible segments of the population who have been identified as being greatly impacted by exposure to either ozone or particulates.

Although not measured frequently in very high concentrations, carbon monoxide can cause impairment of consciousness and is especially harmful to people with emphysema or heart conditions. The Basin has met the criteria defining attainment

of the carbon monoxide since 2002. A petition to re-designate the Basin as attainment will be submitted to U.S. EPA in the near future.

2.2.1 Ozone Trend

Figure 2-4 depicts the long-term trend of days when the federal 1-hour ozone has been exceeded at one or more locations in the Basin. Also depicted in the figure is the regional peak concentration. As demonstrated by the trend, ozone air quality has significantly improved since the mid-1970's. The rate of improvement has slowed in the later 1990's and has shown a minor reversal over the past two years.

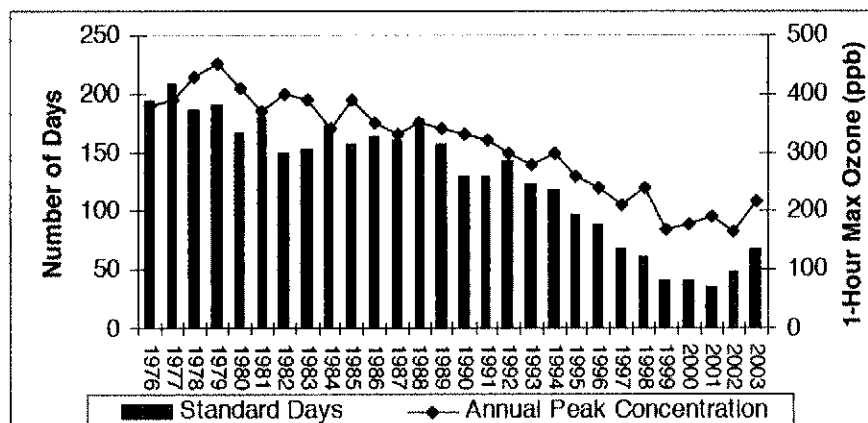


FIGURE 2-4

Trend of Days Exceeding the Federal 1-Hour Ozone Standard in the South Coast Air Basin and Annual Peak Concentration (ppb)

Figure 2-5 depicts the long-term trend of days when the federal 1-hour ozone standard was exceeded at Santa Clarita. When compared to the Basin totals, the trends are generally consistent with time. On average, Santa Clarita experiences violations of the 1-hour ozone standard on approximately fifty percent of the days each year that a basin-wide violation occurs.

Two features are very prominent in the recent ozone trend: First, no violations of the federal 1-hour average ozone standard were observed at the Santa Clarita monitoring site in 1999 and only one was observed the following year. The second characteristic of the recent trend has been the sharp increase in the number of violations observed in 2002 and 2003. A fundamental question arises when analyzing the recent trend: was the improvement in 1999-2000 real or is the 2002-2003 increase in violations a truer measure of ambient ozone in the area?

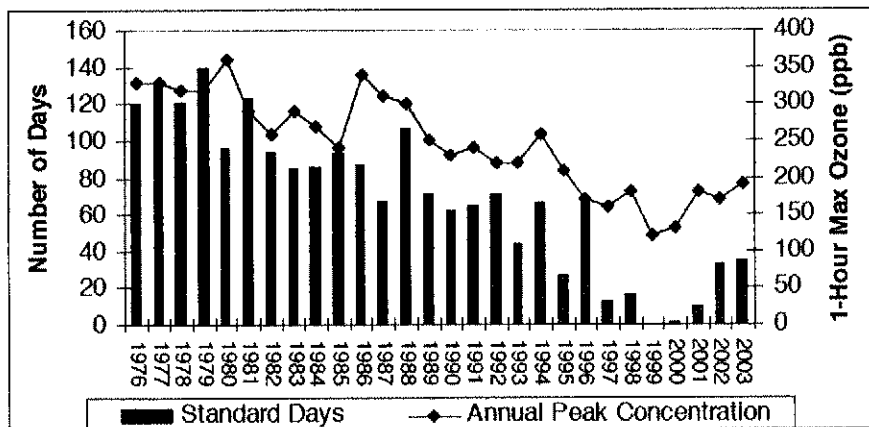


FIGURE 2-5
Trend of Days Exceeding the Federal 1-Hour Ozone Standard in Santa Clarita and Annual Peak Concentration (ppb)

2.2.1.1 Air Monitoring Station Relocation

In the spring of 2001, the Santa Clarita monitoring station was moved from its long-term location at L.A. County Fire Station #73 (24875 N. San Fernando Road, Newhall) to a site approximately one half mile to the east in a county maintenance yard. The fire station monitoring site on San Fernando Road was limited in space and had exposure interference from trees. The site was also adjacent to the fire department's diesel refueling station and was impacted from traffic emissions on San Fernando Road and from fire station activities. Diesel fire equipment, as well as routine traffic, emit high volumes of nitric oxide (NO). NO readily reacts with ambient ozone to titrate ozone concentrations nearby the NO emissions source. As a consequence, the fire station site may have been reading nominally lower ozone concentrations than the surrounding area. District staff determined that the new monitoring location receives better exposure and was less subjected to traffic influences than at the fire station.

At the time of the move, the ozone instrumentation was replaced and upgraded. The older equipment used at the fire station was found to have a problem with surface resistance on the intake manifold that scavenged ozone before reaching the analyzer. It is difficult to determine to what extent and when the equipment began to experience a loss in recorded ozone. The equipment is routinely calibrated and performance is determined to be acceptable if the results are within an acceptable range prescribed by both U.S. EPA and CARB. It is most likely that the instrument was operating at the lower bounds of acceptable performance at the fire station monitoring site during 1999 and 2000. This feature, together with favorable weather conditions, may have accounted for the unusually low number of days exceeding the

federal 1-hour average ozone standard. After the monitoring site relocation in the spring of 2001, higher ozone concentrations were observed by the new instrumentation. Concurrently, Santa Clarita experienced an upswing in the number of days exceeding the federal standard in 2001 and 2002 while leveling off in 2003. Other factors such as wildfire activity, regional changes in emissions levels and seasonal weather also may have contributed to the observed trend.

2.2.1.2 Wildfires

Due to drought conditions resulting from the record low rainfall measured over the past few years, much of the vegetation in the wildland interfacing the urban portion of the Basin has been stressed and has had dangerously low fuel moisture. Numerous wildfires have been ignited in Southern California. In particular the Santa Clarita area has been impacted each of the past three years (2002-2004). While the direct air quality impact caused by wildfires is due to fine particulates from the smoke, chemical reactions take place in the smoke plume that can elevate ozone concentrations. Experimental data captured from the Lodi Canyon controlled burns conducted in the Angeles National Forest during the late fall of 1986 indicated that on days having low ozone formation potential, a burn could generate concentrations of ozone exceeding 200 ppb with the smoke plume. The fires that occurred in the Santa Clarita valley during 2002 were very stubborn, lasting several days. Unlike the typical Santa Ana borne wildfires, the 2002 and 2004 fires fed upon the strong onshore sea breeze flow. Re-circulation of the smoke was observed throughout the Santa Clarita area and back into the San Fernando Valley. Several violations of the federal ozone standard occurred in both receptor areas as the fires burned and there existed a strong likelihood that the fires played a role in the enhanced ozone formation.

2.2.2 PM10 Trend

Figure 2-6 depicts the long-term trend of the peak annual average PM10 concentrations in the Basin. Also depicted in the figure is the regional peak 24-hour average concentration. The Basin exceeds the federal annual average PM10 standard ($50 \mu\text{g}/\text{m}^3$) and the 24-hour daily average standard ($150 \mu\text{g}/\text{m}^3$). The trend of annual average particulate has shown improvement since the late 1980's, however at a slower pace regionally than ozone. While the peak 24-hour average concentration continues to exceed the federal 24-hour average standard, it is important to note that since the mid 1990's the overwhelming number of days exceeding the standard were associated with high wind events (i.e. Santa Ana weather conditions and wildfires).

In the Santa Clarita Valley, annual average and 24-hour average concentrations of particulates are below the respective federal standards. Figure 2-7 shows the PM10 trends from 1989 through 2002. Over the last decade, the annual average concentration has been consistently about 70 percent of the federal annual standard. For the same period, the 24-hour maximum concentration has been on average less than 50 percent of the federal standard.

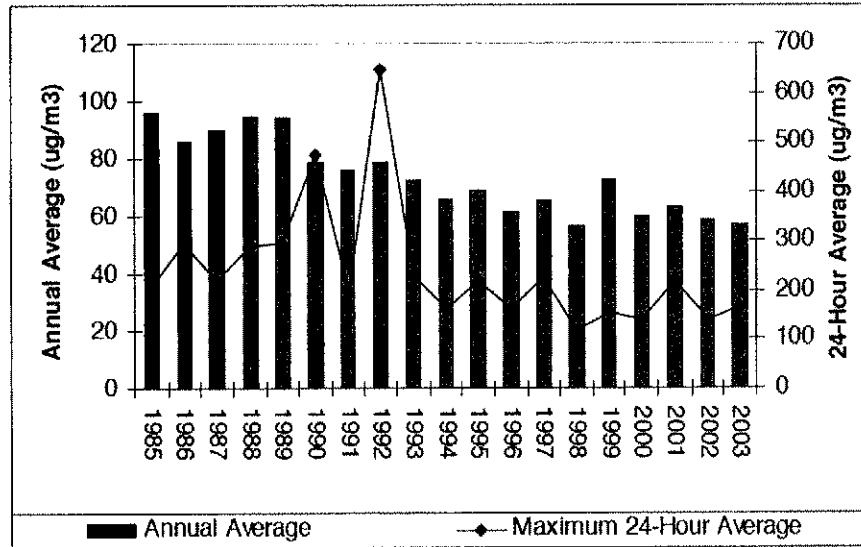


FIGURE 2-6

Basin Annual Average and Maximum 24-Hour Average PM10 Concentration

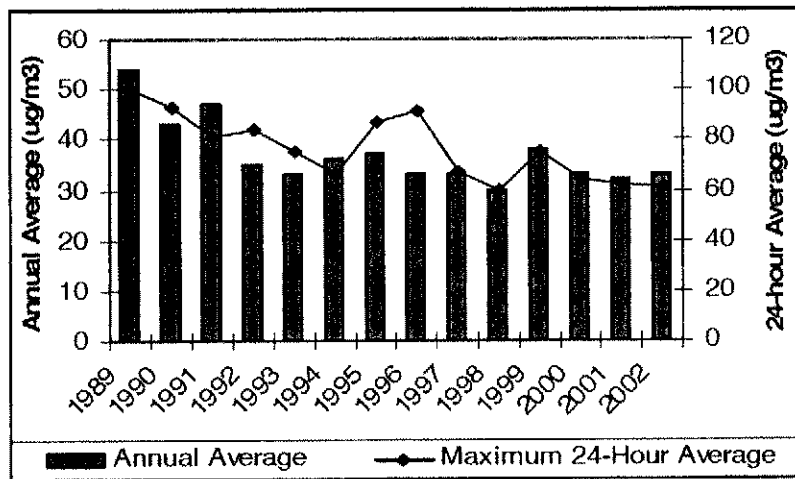


FIGURE 2-7

Santa Clarita Annual Average and Maximum 24-Hour Average PM10 Concentration

3.0 OZONE SIMULATIONS

Air quality modeling simulations were conducted to further examine the ozone impact to Santa Clarita. The modeling analyses were conducted to answer specific questions including:

- What is the subregional gradient of ozone in the Santa Clarita Valley?
- What is Santa Clarita's contribution to local smog formation?
- What is the "weekday effect" and how does it impact Santa Clarita?

3.1 Base and Future Year Simulations

The simulations were conducted for the 2003 AQMP modeling domain, using the SCOS97 meteorological episodes. The SCOS97 meteorological episode includes four days exhibiting increasing degrees of transport to the valley. August 4, 1997, the first day in the episode, was classified as a weak transport day, which occurs approximately 20 percent of the time. August 5, 1997, was classified as a local day, with little or minor transport into Santa Clarita. The local day occurs roughly 6 percent of the year. The final two days of the meteorological episode August 6, 1997, and August 7, 1997, were characteristic of the typical transport pattern which is observed on approximately 66 percent of all days.

Simulations were conducted for the full 2003 AQMP modeling domain. Figure 3-1 presents the Santa Clarita Valley subset of the full modeling domain (grids 15,25 [east-west] through 22,30 [north-south]). The hatched area includes the grids comprising the city of Santa Clarita. Interstates 5 and 210 and State Route 14 are drawn on the figure to provide reference landmarks. Each grid is 5 square kilometers in size.

3.1.3 Local vs. Regional Emissions

Ozone concentrations were simulated for three modeling inventories representing the estimated reactive emissions in the environment. The emissions inventories were developed for 2002 to reflect the conditions observed when ozone concentrations began to increase in the valley; 2007, a milestone year when the Antelope Valley must attain the federal standard; and 2010, the year the South Coast Air Basin must attain the federal 1-hour ozone standard. The emissions inventories include daily tonnages of directly emitted carbon monoxide (CO), oxides of nitrogen (NO_x), volatile organic compounds (VOC) and particulate matter as PM₁₀. VOC and NO_x are the primary precursors "building blocks" of ozone. As is depicted in Table 3-1, Santa Clarita is a relatively small contributor to the total emissions of the key pollutants in both Los Angeles county and the Basin as a whole. Across the board, the emissions are typically less than three percent of the county total and two percent of the Basin total.

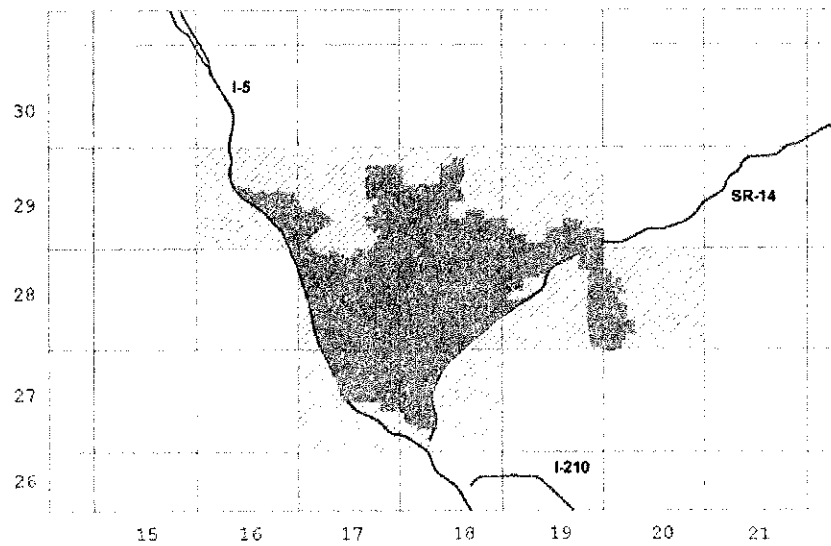


FIGURE 3-1

Santa Clarita Valley Portion of the 2003 AQMP Modeling Domain

TABLE 3-1

2002 Santa Clarita Emissions Profile

Emissions	CO	NO _x	VOC	PM ₁₀
Santa Clarita (Tons Per Day)	63.9	19.3	11.2	3.4
Percentage of LA County	2.2	3.0	2.2	2.4
Percentage of Basin	1.4	1.8	1.4	1.2

3.1.2 2003 AQMP Ozone Model Simulations

The rate of progress towards achieving standard compliance is demonstrated in the 2003 AQMP ozone model simulations. Table 3-2 summarizes the results of the model simulations. In 2002, the highest observed 1-hour average ozone concentration at Santa Clarita reached 169 ppb. Model simulations for a day experiencing average transport but approximately the 95th percentile for ozone formation potential were projected to reach 146 ppb. While the weather conditions for the day simulated and the day having the observed peak are not exactly the same, the potential for ozone generation is roughly equivalent and the projection indicated that an ozone health advisory episode was likely to occur given the emissions present in the atmosphere in 2002. What is encouraging is that on weak or local transport days, Santa Clarita was simulated to attain the federal standard. Extending the analysis to 2007 predicts that Santa Clarita will marginally exceed the standard and by 2010 the city and valley will be in attainment.

TABLE 3-2

2003 AQMP Model-Predicted Santa Clarita Maximum 1-Hour Average Ozone Concentration (ppb)

Transport Regime	2002	2007	2010
Local	78	77	68
Weak	118	115	103
Average	146	135	109

3.2 Ozone Gradients

A closer grid-level examination of the model-simulated ozone concentrations for an average transport day using the 2002 emissions inventory is presented in Figure 3-2. Santa Clarita, like several communities in the Basin, experiences a gradient of ozone air pollution throughout the city. The northwestern portion of the city can be cleaner than the eastern and southeastern portions by as much as 50 ppb. While transport to Santa Clarita via the Santa Clara River valley is a factor, the bulk of the transport originates from the San Fernando Valley and the coastal plain of Los Angeles. The location of the old fire station monitoring site is in grid 17 [horizontal axis], 27 [vertical-axis]). The monitoring station relocation in 2001 shifted the analyzer location in the direction of the main pollution transport corridor and increasing ozone. Thus, on days when ozone concentrations measured at the fire station monitoring site were just below the federal standard (124 ppb) it is likely that the

projected concentration at the new location could be higher, causing the standard to be violated. Clearly, the move of the monitoring station and the equipment replacement has impacted the frequency of days reported exceeding the federal standard since 2001.

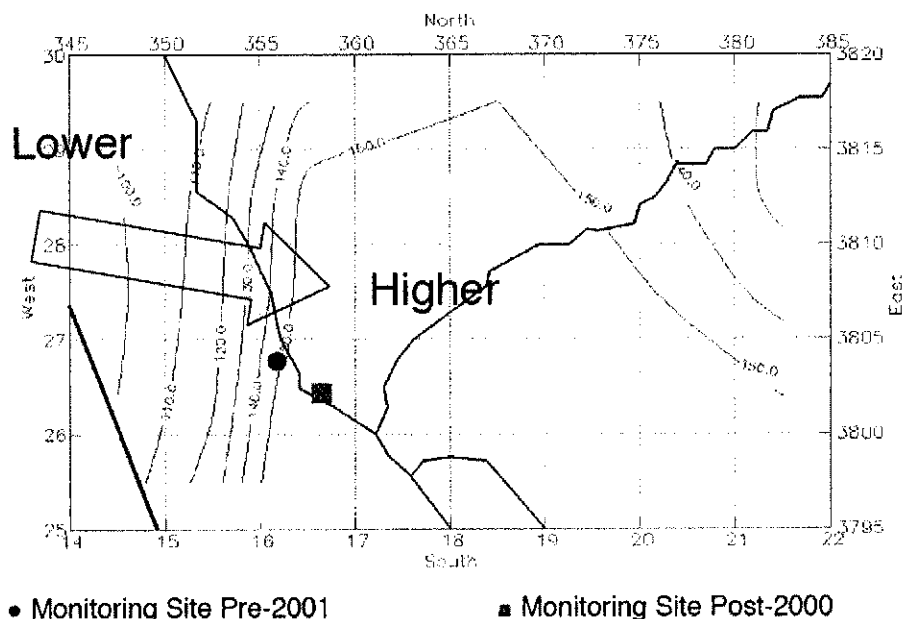


FIGURE 3-2

2002 Simulated Ozone (ppb) Gradient in Santa Clarita Valley for the Average Transport Regime

3.3 Santa Clarita's Contribution to Observed Ozone

A principal question asked by residents and city officials of Santa Clarita was "what is our contribution to the ozone problem?" Table 3-3 summarizes a series of ozone sensitivity simulations where selected segments of the emissions were withdrawn from the analysis to assess the impact of different source regions to Santa Clarita's locally observed ozone. The first simulation withdrew all of the anthropogenic (man-made) emissions from Santa Clarita. A second simulation withdrew the emissions from upwind Santa Barbara and Ventura counties. An additional simulation doubled the Santa Clarita emissions to test the impact to the community.

In general, under average transport conditions, emissions from the Santa Clarita area do not contribute significantly to ozone formation in the city. In fact, the emissions of oxides of nitrogen act to scavenge some of the ozone that is transported to the area. (This is depicted by a negative value of the percentage contribution listed in Table 3-3). Under local and weak transport conditions, emissions from Santa Clarita

have a minor contribution to the observed ozone air quality profile. In contrast, the Ventura and Santa Barbara emissions, coupled contribute as much as 10 percent to the ozone problem under average transport conditions. Ozone transport and emissions from the San Fernando Valley and the Los Angeles coastal plain are responsible for the bulk of the observed ozone in Santa Clarita. Carryover, the process where yesterday's smog provides a platform for today's smog to develop, is also a factor.

TABLE 3-3

Percentage Emissions Contribution to Santa Clarita Ozone Air Quality

Transport Regime	Santa Clarita Emissions	Doubled Santa Clarita Emissions	Santa Barbara & Ventura Emissions	Carryover & Other Basin Emissions
Local	2.8	0.7	0.7	96.5
Weak	1.2	-0.2	6.0	92.8
Average	-2.9	-2.9	9.9	93.0

3.4 Weekend Effect

A final issue that was addressed through the ozone simulations was the "weekend effect" and its impact on Santa Clarita air quality. Ozone concentrations observed on weekend days are higher than that observed on weekdays. Figure 3-3 illustrates the day-of-week smog season average ozone concentrations for 1-hour and 8-hour averaging periods measured in Santa Clarita. Over the period 2001-2003, a disproportionate percentage of the days exceeding the standard occurred on weekend days (43 percent as opposed to the expected two days out of seven or 28 percent). In general, the weekend effect reflects the change in emissions levels and emissions sources that occur from weekdays (Monday-Thursday) and Friday, Saturday and Sunday. The primary cause of the weekend effect has been postulated in several analyses as the change in motor vehicle emissions patterns both in space and time as the weekend progresses. In general the postulation is as follows: Extended commuting on Friday night coupled with a later start to the morning commute on both Saturday and Sunday gives rise to a more reactive pollution cloud; the reactive pollutant cloud generates ozone concentrations earlier in the day, reaching peak concentrations at a faster pace. In addition, the weekend effect is most notable nearby the emissions source areas.

Three scenarios were simulated to test the impact of the weekend effect on transport of ozone to Santa Clarita. First, the August SCOS97 ozone meteorological episode was simulated assuming the August 4 through 7, 1997, episode took place on a Friday through Monday rather than a Monday through Thursday as it was observed. For this simulation, August 5 was assigned the Saturday emissions profile and August 6 the Sunday emissions profile. The analysis was repeated moving the start date (August 4) to a Thursday, placing August 6 as the Saturday and August 7 as Sunday. A third simulation was conducted placing August 4 on a Wednesday so that the August 7 was treated as a Saturday.

The reasoning for this rotation was to test the weekend effect when the Friday emissions were placed in different meteorological scenarios. In the first simulation, the Friday meteorology was classified as a weak transport day. The second simulation placed Friday as a local transport day. For the third simulation the Friday was classified as an average transport scenario.

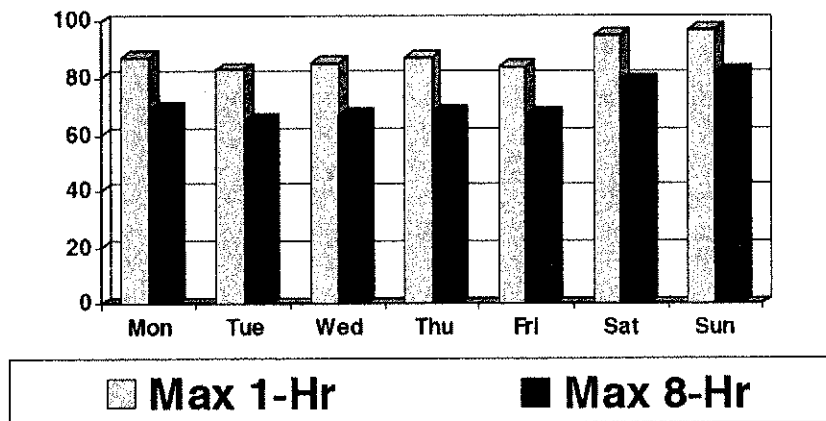


FIGURE 3-3

2001-2003 Average Santa Clarita Daily Maximum 1-Hour Average Ozone Concentration (ppb)

The results of the weekend simulations for the Santa Clarita modeling area are presented in Table 3-4. The analysis indicated that on weekend days experiencing average transport, ozone concentrations could increase by as much as 23 percent over weekdays. Under weak or local transport conditions, the weekend effect would be negated.

TABLE 3-4

Simulated Weekend Change in Ozone Concentration from Weekdays at Santa Clarita

Transport Regime	Percentage Change in Ozone Concentrations
Local	-6.5
Weak	-3.3
Average	+ 22.9

4.0 PARTICULATE SIMULATIONS: CURRENT IMPACTS

PM10 and PM2.5 are comprised of several components which are associated with a variety of sources. Sulfate, nitrate and organic particulate are mostly associated with urban smog that is transported to Santa Clarita and comprise the bulk of the fine particulate PM2.5 mass. Elemental carbon (including diesel soot) together with roadway and construction dust have local emissions source contributions as well as the urban signature. This is clearly observed in Santa Clarita where traffic generates re-entrained road dust and diesel soot and construction projects are widespread.

Air quality modeling simulations were conducted to examine the relative contributions of smog transport and local source emissions to the PM10 impact on Santa Clarita. The modeling analyses were conducted to answer specific questions including:

- What is Santa Clarita's contribution to local PM10 and PM2.5 levels?
- What will be the impact of valley growth on PM10 air quality?
- What will be the impact of the Cemex/TMC mining operations on PM10 air quality

4.1 PM10 Gradient

Figure 4-1 depicts the 2002 simulated annual average PM10 concentration for the Santa Clarita Valley. The peak particulate concentrations are well represented by the air monitoring site (grid 17,29) where the southern and central portions of the city experience the highest concentrations. The concentration drops significantly in the northern third and eastern portion of the city. The easternmost edge of the city is roughly 18 $\mu\text{g}/\text{m}^3$ cleaner than the central portion of the city. The highest PM10 concentrations occur nearby the traffic arteries where road dust is a major contributing factor. Localized hot-spots for particulate emissions are also observed and correspond to construction activities and mining in the valley. The valley, overall, is in compliance with the federal annual average PM10 standard.

4.2 Santa Clarita's Contribution to Observed PM10 and PM2.5

A series of annual air quality simulations was conducted to assess the local Santa Clarita emissions contribution to its observed PM10 air quality profile. The UAMAERO-LT regional particulate simulation model used in the 2003 AQMP annual PM10 modeling analyses was simulated for the 2002 modeling inventory (see Table 3-1) and the AQMP modeling domain. The Santa Clarita Valley subset of the 5 square kilometer modeling domain is evaluated for this portion of the analysis.

The UAMAERO-LT simulation model provides predictions of both PM10 and the PM2.5 fraction. While PM2.5 is not routinely measured in the Santa Clarita Valley, the model predictions are driven by the regional emissions and they afford a

perspective of the expected local impact. A first simulation removed all area source emissions from the city of Santa Clarita (but included the mobile source contribution). A second simulation doubled the mobile source emissions over the current level while leaving the area source emissions unchanged.

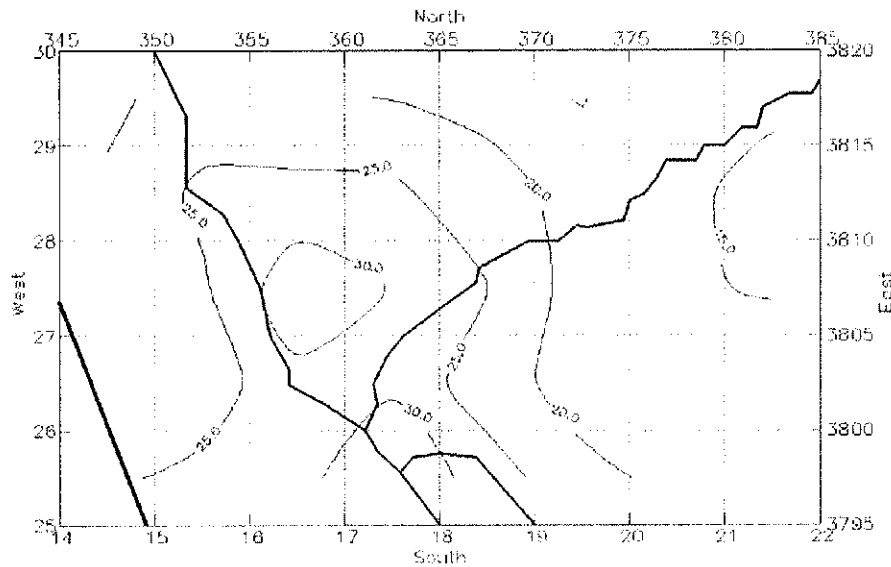


FIGURE 4-1

2002 Simulated Annual Average Santa Clarita PM10 ($\mu\text{g}/\text{m}^3$)

While construction contributes to a portion of the mobile source emissions, its direct impact is in the area source category. By taking the area source emissions out of Santa Clarita, an estimate can be made of the impact of current (2002) construction to dust levels in the area. Doubling the mobile source emissions provides an estimate of the impact of growth on the community after the construction activities have stabilized. The impact of future construction emissions on Santa Clarita particulate air quality is addressed separately, and discussed in a later section of this document.

Table 4-1 summarizes the results of these sensitivity analyses. From the 2003 AQMP air quality simulations, PM2.5 accounts for roughly 57 percent of the PM10 total mass concentration in the city of Santa Clarita. When area source emissions were removed from the city of Santa Clarita, the PM10 concentrations were projected to decrease by an average of 10 percent. For the same emissions scenario, PM2.5 concentrations were predicted to decrease by approximately 7 percent. When mobile source emissions were doubled, only a nominal increase in PM10 and PM2.5 concentrations was predicted. What can be inferred from these analyses is that current construction activities are an identifiable contributor to particulate levels in the community; however, the overwhelming contribution is from upwind transport.

In addition, growth within the valley (excluding direct construction emissions or mining activities) will have a nominal impact on air quality.

TABLE 4-1

Annual Particulate Air Quality Simulation Sensitivity Analyses Summary:
Percentage Change in Concentration from 2002 Base Emissions

	No Area Sources	Doubled Mobile Source Emissions
PM10	-10 %	+1%
PM2.5	-7%	+2%

5.0 PARTICULATE SIMULATIONS: CONSTRUCTION AND DEVELOPMENT

A significant portion of the analysis was directed towards determining the impact of future construction on PM10 air quality in the Santa Clarita Valley. The AQMP 2006 and 2010 future year projections of air quality in the Santa Clarita Valley reflect the growth estimates provided by the Southern California Association of Governments (SCAG). Regardless, the Santa Clarita Valley is not expected to complete its build-out by 2010. City growth estimates expect place construction activities continuing over the next 25 to 30 years. Included in this estimate is the development of Newhall Ranch which will produce more than 21,000 homes before the project is completed. In the short term, mining activities from the Soledad Sand and Gravel Mining Project (Cemex/TMC) located to the east of the city are expected to commence mid-decade and expand operations at an accelerated rate thereafter. This will result in increased local particulate emissions.

Two sensitivity analyses were conducted to estimate the potential impacts of construction and mining to the air quality profile. These included simulating (1) the simultaneous build-out of all recorded, pending and approved land parcels in the valley over a 25-year period and (2) the phased development of the Cemex/TMC mining operations. The 25-year build-out of the valley was simulated to determine the additional annual impact on PM10 air quality that would be added to the current profile. It is noted that the simultaneous build-out of all parcels over the 25-year period is unlikely; however, this estimate places an upper bound on the estimated PM10 impact.

5.1 Emissions for the Twenty-five Year Build-Out

Residential construction growth and associated PM10 emissions were determined for each available land parcel by scaling development on an acreage basis to the profile of development determined for the Newhall Ranch project. PM10 emissions from multi-dwelling, commercial and industrial development were scaled on an acreage basis and then allocated based on required time estimated for building construction (e.g. a commercial dwelling requires 1 year to complete construction). Figure 5-1 depicts the distribution of parcel tracts in the study area with the modeling grid overlaid. CARB construction emissions factors were used to translate development into PM10 emissions. The phased and maximum allowable PM10 emissions for the Cemex/TMC mining operations were extracted from the project's Final Environmental Impact Statement (EIS) and the Consent Decree settlement document in the lawsuit *Cemex v. County of Los Angeles* (Case Number CV-02-747 DT).

Figure 5-2 depicts the daily PM10 emissions expected to result from the projected 25-year build-out of the Santa Clarita Valley overlaid on the modeling grid. The daily PM10 emissions total just over 3 tons per day in the Valley. As an example of the diversity of the development, Table 5-1 lists the tracts that contribute to the construction estimation and their status for development for grid 19,29. Fifteen tracts covering 1,567 acres of land in the 5 square kilometer grid are projected to contribute 337 lbs of PM10 emissions on a daily basis.

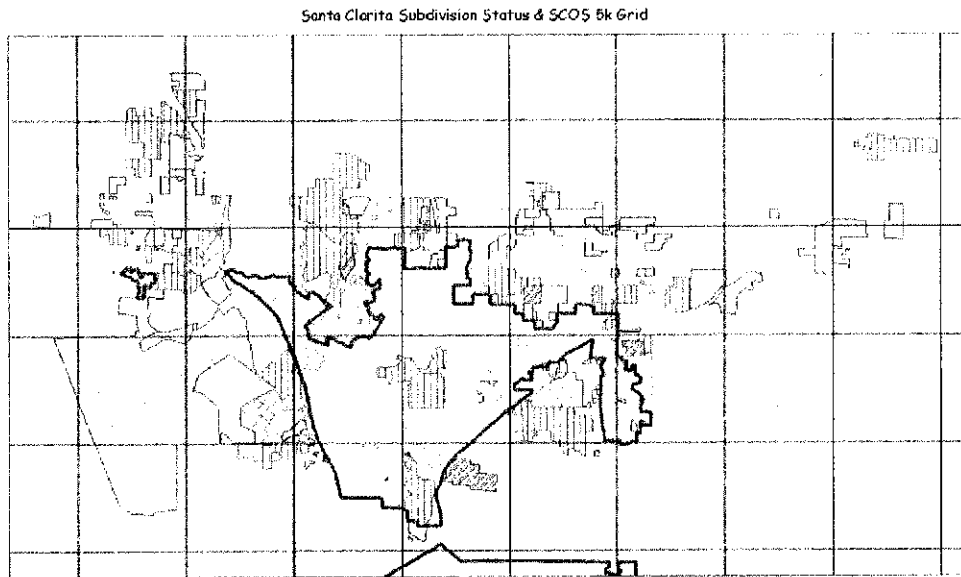


FIGURE 5-1

Santa Clarita Land Parcel Subdivisions

<i>j \ i</i>	<i>15</i>	<i>16</i>	<i>17</i>	<i>18</i>	<i>19</i>	<i>20</i>	<i>21</i>	<i>22</i>
<i>30</i>	387	130	182	62	101	18	7	99
<i>29</i>	365	411	378	288	337	143	81	42
<i>28</i>	552	383	90	101	273	46	0	0
<i>27</i>	227	44	15	266	13	0	0	0
<i>26</i>	0	0	0	0	0	0	0	0

FIGURE 5-2

25-Year Build-Out Grid Level PM10 Emissions (lbs/day)
(Grid coordinates are listed as italics)

TABLE 5-1

Parcel Tracts Contributing PM10 Emissions in Grid 19,29 (Shaded in Figure 5-2)

TRACT	STATUS	ACRES
44967	RECORDED	338
45416	RECORDED	115
46353	APPROVED	65
46626	RECORDED	79
46716	APPROVED	30
49024	PENDING	37
49621	APPROVED	9
50467	PENDING	58
50846	PENDING	477
52194	PENDING	63
52355	APPROVED	33
52777	PENDING	79
52790	APPROVED	53
52990	PENDING	79
53074	APPROVED	52

5.2 PM10 Emissions from the Cemex/TMC Mining Site

As previously stated, PM10 emissions from the Cemex/TMC mining site reflect the projected routine operation and maximum allowable levels of production for two scheduled, phase-in periods. The emissions for the mining site (located in grid 21,29) were extracted from the Final EIS for the project. For all scenarios, the mining site was assumed to operate on a Monday through Friday schedule for 16 hours a day. Figure 5-3 depicts the topography of the Cemex/TMC mining site in reference to the surrounding area.

Mining operations were projected to occur in two phases: Phase I, years 1-10; and Phase II, years 11-20. The PM10 emissions for Phase I were estimated at 445 lbs/day. Phase II emissions were estimated at 641 lbs/day. As part of the Consent Decree settlement document, a maximum allowable PM10 emissions rate of 761 lbs/day was included in the finer scaled PM10 analysis. This rate reflected a maximum allowable production rate of five million tons of excavation per year. All mining emissions were allocated to grid 21,29 for the analysis.

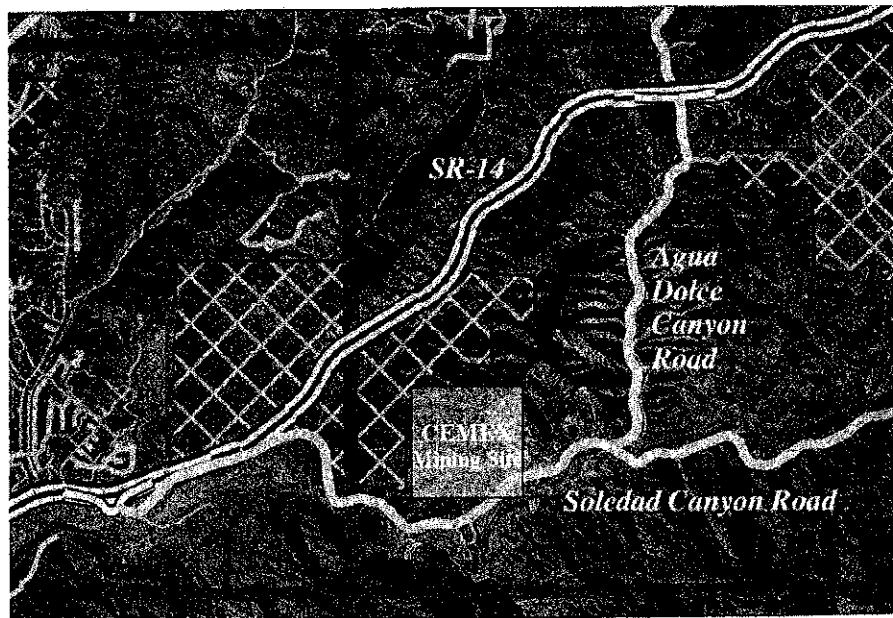


FIGURE 5-3

Cemex/TMC Mining Site in Soledad Canyon

5.3 Projected Future Year Impacts from Sensitivity Analyses

The projected PM₁₀ impacts from the 25-year build-out and the two phases of mining operations were simulated to determine the upper bounds of additional PM₁₀ that would be expected to impact the Santa Clarita Valley in the near term (1-10 years) and long term (10-20 years). The additional PM₁₀ impacts from the 25-year build-out and the Phase I mining operation are presented in Figure 5-4. A maximum increase in annual PM₁₀ concentration of 5 $\mu\text{g}/\text{m}^3$ is projected from the 25-year build-out. The predicted impact of the Cemex/TMC mining operation is approximately 2 $\mu\text{g}/\text{m}^3$, focused on the immediate area surrounding the mine. When the mining operation shifts to Phase II, the impact will increase to 3 $\mu\text{g}/\text{m}^3$; however, there will be no net change in the impact caused by the 25-year build-out.

Figure 5-5 combines the projected 25-year annual build-out and Phase I mining operations PM₁₀ impacts with the observed 2002 concentrations. Figure 5-6 repeats this process for the annual 25-year build-out impact and Phase II mining operations and the 2006 AQMP projected PM₁₀ air quality. (While 2006 is within the Phase I time frame, future year modeling beyond 2006 shows little change in the spatial distribution and concentration levels in the Santa Clarita portion of the modeling domain; as a consequence 2006 is representative of the Phase-II projected PM₁₀ baseline). As depicted, the federal PM₁₀ standard would not be exceeded with the proposed build-out or development of the mining site in either the near-term or long-term analysis. PM₁₀ air quality would exceed the more protective California standard in both scenarios.

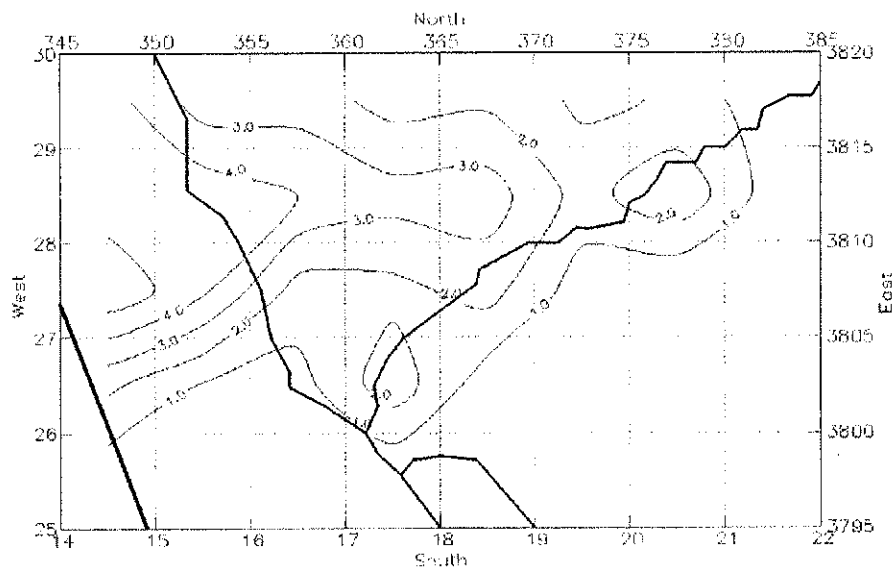


FIGURE 5-4

Simulated Annual PM10 Impact ($\mu\text{g}/\text{m}^3$): 25-Year Build-Out & Phase I Mining

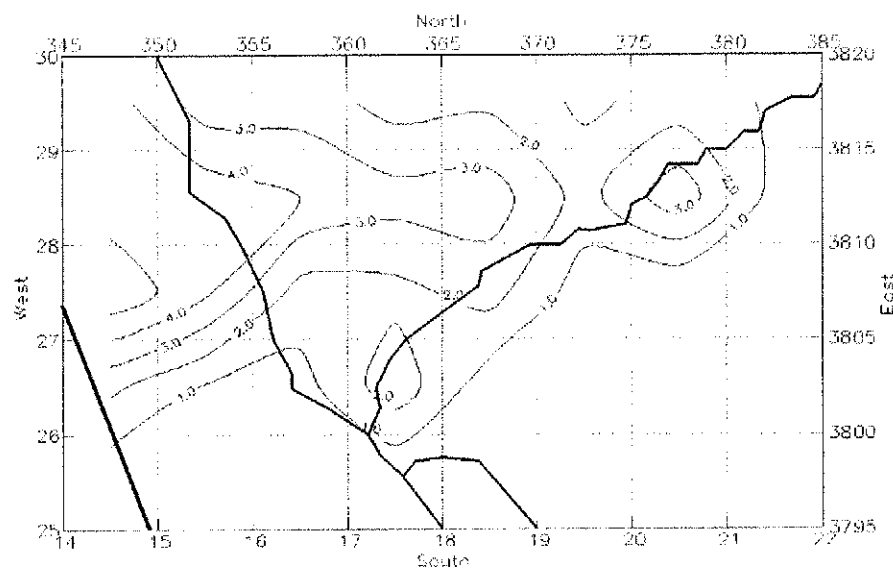


FIGURE 5-5

Simulated Annual PM10 Impact ($\mu\text{g}/\text{m}^3$): 25-Year Build-Out & Phase II Mining

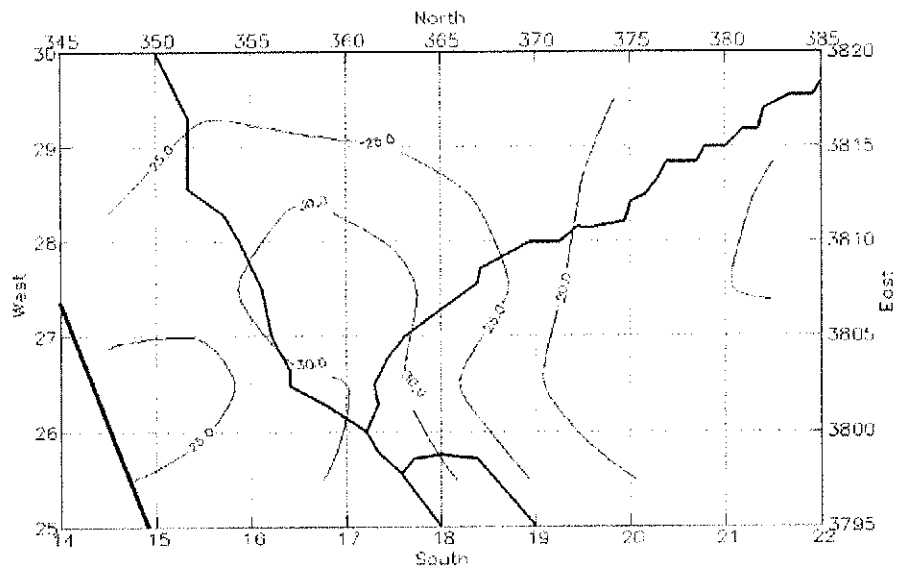


FIGURE 5-6

Simulated 2002 Annual PM10 ($\mu\text{g}/\text{m}^3$) With Build-Out and Phase I Cemex/TMC Mining

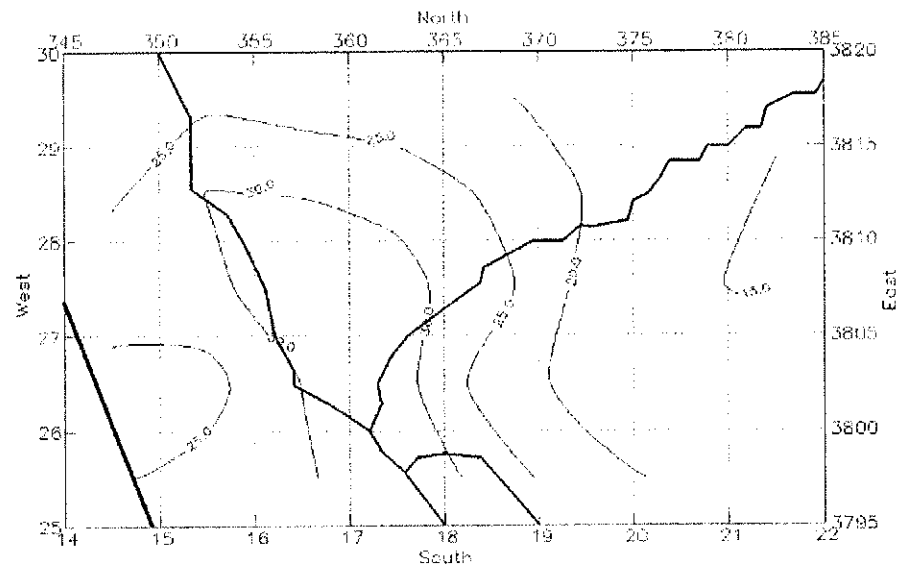


FIGURE 5-7

Simulated 2006 Annual PM10 ($\mu\text{g}/\text{m}^3$) With Build-Out and Phase II Cemex/TMC Mining

5.4 Simulating Cemex/TMC Emissions at a Finer Scale of Resolution

The preceding PM10 simulations provided the regional impacts due to growth and development of the Cemex/TMC mining site. However, the 5 square kilometer grid resolution does not lend itself to determining the local impacts from the mine operations to nearby sensitive receptors of PM10. A second sensitivity modeling simulation analysis was conducted to determine the finer scale gradient of projected PM10 impact. This analysis used the U.S. EPA ISCST3 point source model to simulate mining operations and determine the offsite impacts at a grid resolution of 500 meters. Annual average PM10 concentrations were calculated for each grid intersection or "flag pole" emanating from the mine boundary at 500 m intervals out to 5 km.

Figure 5-8 depicts the mining site with the 500 m and 5 km grid overlaid. The closest residential dwelling is located approximately 500 m to the south of the mining site and the nearest sensitive receptor (school) is located approximately 4,500 m to the west of the mining site.

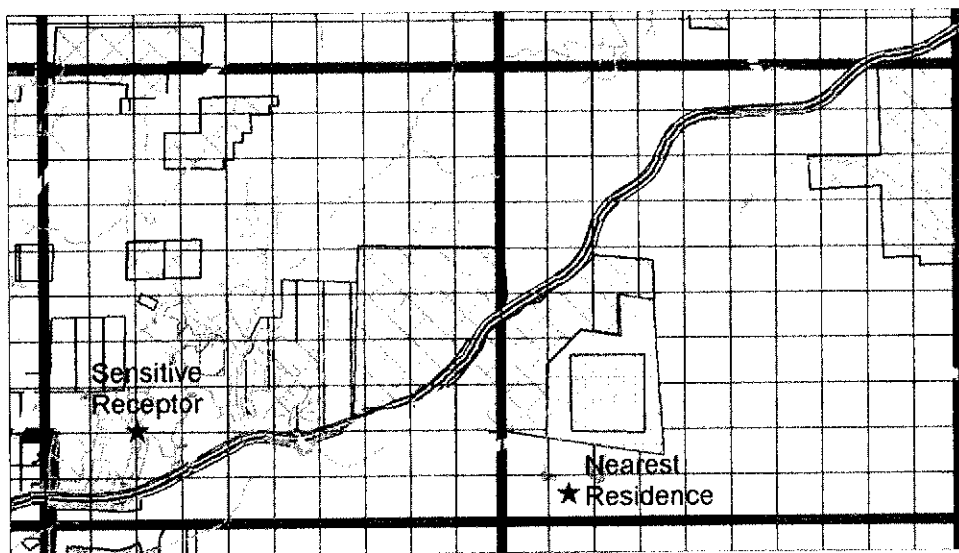


FIGURE 5-8

Cemex/TMC Mining Site With Flag Pole Grid

The simulation was conducted for a one-year period using both urban and rural meteorology developed for the mining site from the 1998-99 MATES-II meteorological modeling data. In general, simulations using a Gaussian model in the Basin are conducted using the urban meteorological assumption. Due to its unique

topography, the Santa Clarita Valley was simulated using both the urban and rural meteorological assumptions to bound the analysis.

Table 5-2 summarizes the results of the simulations. As expected, the modeling analysis using the rural meteorological option produced the highest impacts to the community with concentrations projected to reach approximately $18 \mu\text{g}/\text{m}^3$ at the fence line. The maximum impacts to the nearest residence and nearest sensitive receptor (Phase II using the rural option) were calculated at 12.5 and $0.2 \mu\text{g}/\text{m}^3$ respectively. When the flag pole concentrations were averaged over the 5 square km grid (21,29), the average impact was consistent with that simulated using the AQMP modeling platform. In all of the scenarios, including the rural maximum allowable case, the projected impact added to the baseline PM10 would not result in a violation of the federal annual average standard.

TABLE 5-2

ISCST3 Simulated PM10 Impacts ($\mu\text{g}/\text{m}^3$) from Cemex/TMC Mining Site

Impacted Receptor	Phase I		Phase II		Maximum Allowable	
	Urban	Rural	Urban	Rural	Urban	Rural
5-Km ² Grid Average	1.4	3.1	2.0	4.5	2.6	5.7
Fence Line	4.2	12.2	6.0	17.6	7.7	22.3
Nearest Residential	2.9	8.7	4.2	12.5	5.3	15.9
City Line - Canyon Country	0.3	0.7	0.4	1.0	0.5	1.3
Northeast Modeling Region	0.2	0.4	0.3	0.6	0.4	0.7
Nearest Sensitive Receptor	0.1	0.2	0.1	0.2	0.2	0.3

6.0 RISK FROM DIESEL PARTICULATES

The final phase of the analysis focused on the potential toxic impact or "risk" that could arise from the development of the Cemex/TMC mining site due to emissions of diesel particulate, both from in-situ operations and from gravel hauling offsite.

Risk is expressed as a probability of the development of excess cancer cases to the community based upon a lifetime (70 years) of exposure. The 1999 Multiple Air Toxics Exposure Study II (MATES II) analysis conducted for the South Coast Air Basin estimated that the Santa Clarita average community risk from all sources of toxic emissions was approximately 500 in one million. (The basin-wide average estimated by MATES II exceeded 1,400 in one million). Exposure to diesel particulates was the major driver of risk to the community.

Diesel particulates have been shown to have a unit risk factor of 300 in one million for every $1.0 \mu\text{g}/\text{m}^3$ of exposure. As a consequence, even comparatively small emissions can have a significant increased risk to the community. For comparison purposes, AB2588-Air Toxics "Hot Spots" Program notification and risk reduction levels are 10 and 25 in one million. Risk is presented in this analysis for both the urban and rural meteorological assumptions. In general, the SCAQMD uses the urban meteorological mode for hazardous risk assessments. Since the Santa Clarita Valley has a rural component, the simulations were conducted for the rural mode as well as the urban model. The assessment of risk using the two meteorological assumptions places an upper bound on the expected risk to the community.

6.1 In-Situ Mining Operations

Table 6-1 provides the Final EIS estimated annual diesel emissions rates for the various operations option and load considerations for the Cemex/TMC mine. Note: emissions for Phase II operations decrease compared with Phase I. This reflects the implementation of federal and California diesel control measures later in this decade. The diesel emissions were used to scale the ISCST3 predicted point source impacts to determine risk to the community neighboring the mining site. The results of the analysis are presented in Table 6-2.

TABLE 6-1

Diesel Particulate Emissions From Cemex/TMC Mine

Operation Option	Annual Emissions Rate
Phase I	1,528 lb/yr
Phase I Maximum Allowable	3,043 lb/yr
Phase II	1,431 lb/yr
Phase II Maximum Allowable	1,817 lb/yr

TABLE 6-2

ISCST3 Simulated Risk from Diesel Particulate from Cemex/TMC Mining
(Increased Probability of Excess Cancers Per Million People Exposed)

Impacted Receptor	Phase I				Phase II			
	Average Operations		Maximum Allowable		Average Operations		Maximum Allowable	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Fence Line	16	47	32	93	15	44	18	52
Nearest Residential	11	33	22	66	10	31	12	37
City Line - Canyon Country	1	3	2	6	1	2	1	3
Northeast Modeling Region	1	2	2	4	1	1	1	2
Nearest Sensitive Receptor	0	1	1	2	0	1	0	1

The maximum risk predicted by the model simulation occurs at the fence line of the mining site for the Phase I maximum allowable emissions scenario and the rural meteorology option. The maximum predicted risk to the nearest residence exceeds the 25 in one million criteria required for implementing risk reduction measures for the rural meteorology scenarios. However, when the impacts are estimated for the Santa Clarita city line and the nearest sensitive receptor (i.e. school), regardless of the emissions rate or meteorology, the risk falls below 10 in one million. Figure 6-1

depicts this tight gradient of impact for the rural meteorological mode, this time drawn over the two square kilometer grid used for the MATES II analysis. Impacts offsite quickly dissipate with distance from the Cemex/TMC Soledad Canyon facility.

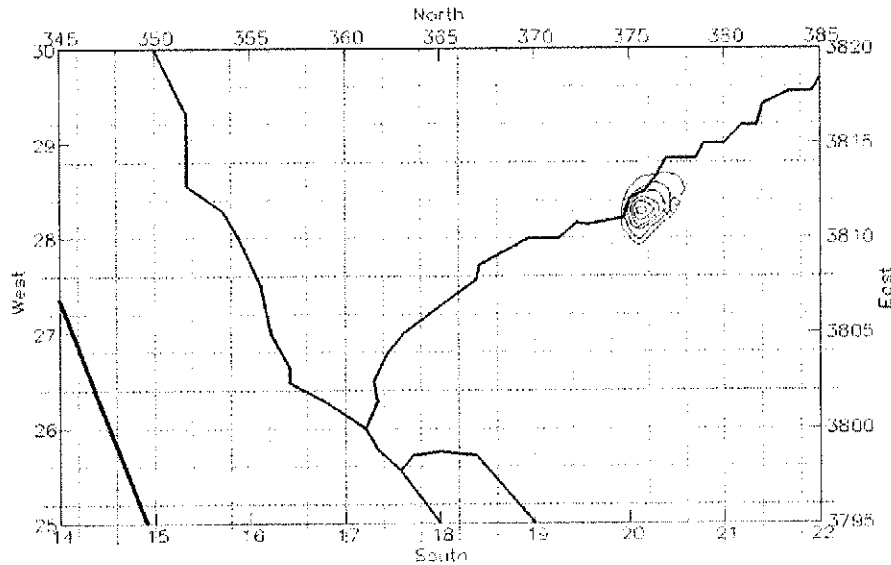


FIGURE 6-1

ISCST3 Phase I Simulated Diesel Risk From Cemex/TMC Mine Operations: Rural Mode
(Increased Probability of Excess Cancers Per Million People Exposed)

6.2 Gravel Hauling Operations

The simulation of risk due to diesel emissions was not limited to in-situ operations but extended beyond the mine due to gravel hauling through the Santa Clarita Valley to local end users and recipients in adjacent valleys. Based upon assumptions provided in the Final EIS, Phase I gravel hauling from the mine will result in 347 round trips by heavy-duty diesel trucks. Phase II will see an increase to 582 round trips. The truck hauling operations are expected to continue 24 hours a day with truck traveling at an average speed of 45 mph. Emission rates for heavy-duty diesels operating under these two travel scenarios (Phase I, 0.312 grams/mile; Phase II, 0.185) were extracted from the CARB EMFAC2002 emissions factor model.

Note again, the emissions rate for Phase II operations is lower than for Phase I reflecting the required introduction of cleaner vehicles and fuels. As a consequence, the daily emissions rate (truck trips multiplied by the appropriate diesel emissions factor) for Phase I and Phase II gravel hauling operations are essentially equal. Since

the difference between the estimated daily emissions rates is nominal, (Phase I being slightly higher), the projected Phase I risk from diesel truck hauling operations stands as a baseline for this analysis and is the only assessment presented.

If the option is exercised to expand gravel production to the maximum allowable rate provided in the Consent Decree, then hauling and the number of truck trips is expected to increase accordingly. Phase I projected risk due to diesel truck emissions under the maximum allowable production rate is estimated to increase by approximately 70 percent over the baseline while Phase II projected risk is estimated to increase by approximately 19 percent over the baseline.

The EIS provided some direct guidance on the direction of truck hauling with 95 percent of the transit moving west towards Santa Clarita and San Fernando Valleys and 5 percent routed east towards the Antelope Valley. However the truck routing through the Santa Clarita Valley was not explicitly provided. Based on estimates of population growth rates and estimates of future aggregate consumption (EIS Table 1.1-3), it was assumed that 54 percent of the westward-bound hauling would be earmarked for the San Fernando Valley traveling exclusively along SR 14. The remaining 46 percent of the westward-bound hauling would fill the needs of the Santa Clarita Valley and would be split between routes including SR 14 and Soledad Canyon Road. Gravel hauling was assumed to extend as far west as the Newhall Ranch development.

Meteorological data sets for four representative locations in the Santa Clarita Valley and the ISCST3 dispersion model were used to calculate diesel impacts to the Santa Clarita Valley for both urban and rural modes. The impacts were calculated for a one kilometer grid for each meteorological data set and the results were merged to provide a mapping of probable diesel impacts and risk to the Valley.

Figure 6-2 depicts the estimated baseline risk from truck hauling for the urban meteorological assumption. In isolated areas, risk exceeds 10 in one million with the maximum impact occurring along the SR 14 freeway. When the less dispersive rural meteorological assumption is used, the impacts increase along the SR 14 corridor and expand along Soledad Canyon Road. (See Figure 6-3). The highest estimated risk for both model simulations occurs near the SR 14 - Soledad Canyon Road separation with a maximum of 25 in one million for the rural meteorological option. In addition the maximum risk to a sensitive receptor occurs within one kilometer of the SR 14 freeway with values of 7 in one million for the urban meteorological mode and 20 in one million for the rural mode.

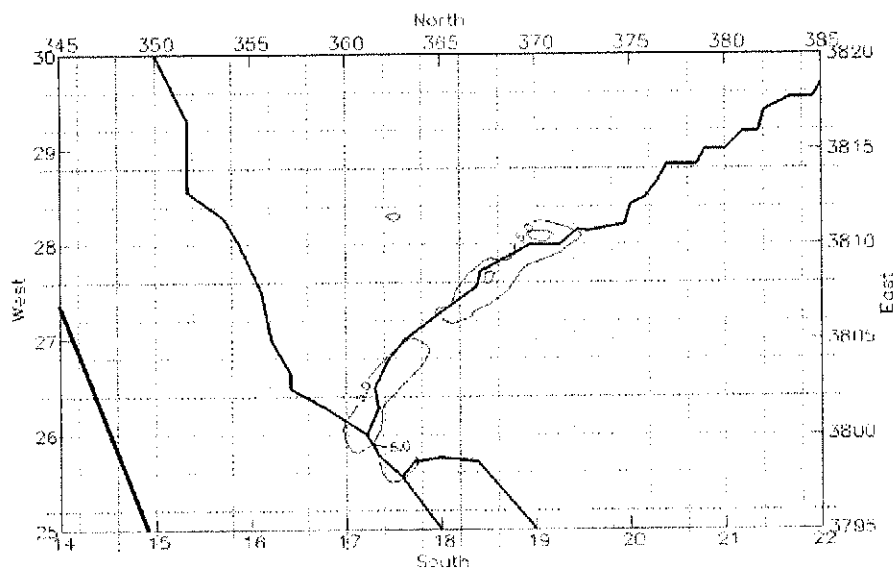


FIGURE 6-2

Simulated Baseline Diesel Risk from Cemex/TMC Gravel Hauling Operations: Urban Mode
(Increased Probability of Excess Cancers Per Million People Exposed)

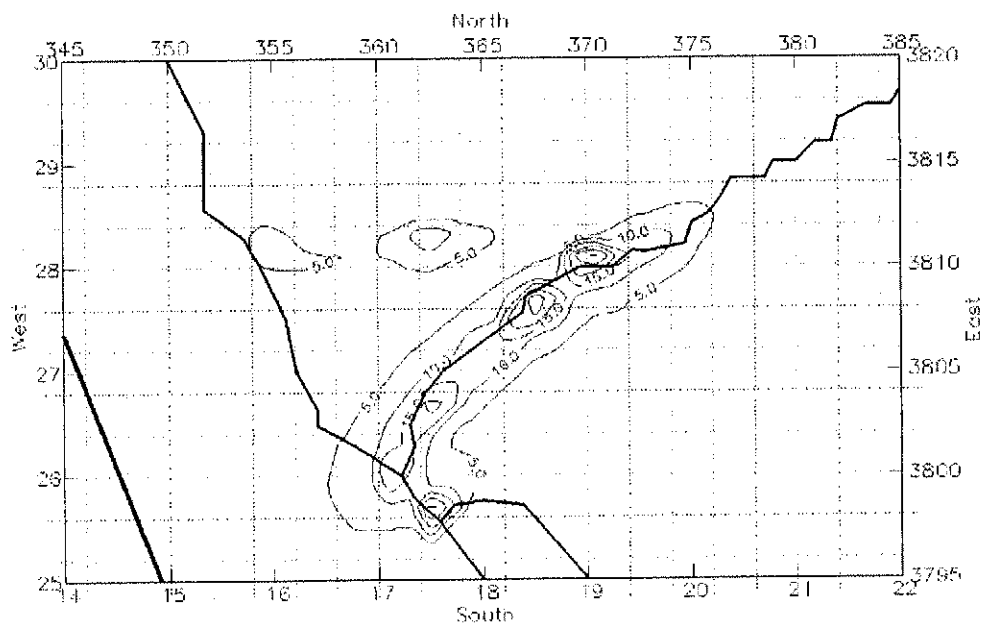


FIGURE 6-3

Simulated Baseline Diesel Risk From Cemex/TMC Gravel Hauling Operations: Rural Mode
(Increased Probability of Excess Cancers Per Million People Exposed)

6.3 Merged Diesel Risk: Mining and Gravel Hauling Operations

Figure 6-4 shows the simulated baseline risk when the mining and gravel hauling operations are merged (for the rural meteorological assumption). Because of the localized impact caused by the in-situ mining operations, there is very little overlapping risk caused by the hauling operations. As a consequence, the results of the risk assessment reported through the table and graphics in the two previous sections do not change significantly when the analyses are merged.

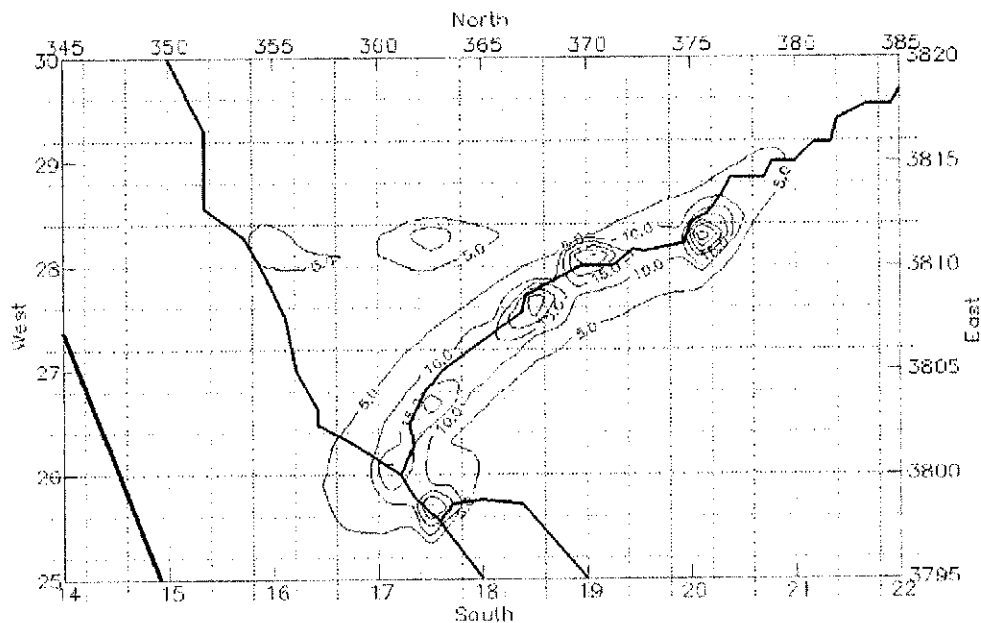


FIGURE 6-4

Merged Baseline Diesel Risk From Cemex/TMC Mining and
Gravel Hauling Operations: Rural Mode
(Increased Probability of Excess Cancers Per Million People Exposed)

7.0 POTENTIAL MITIGATION ACTIONS

The City of Santa Clarita is drafting an aggressive air quality element to its General Plan that will contain many potential mitigation measures to offset the air quality impacts associated with growth and regional transport of smog. The draft element includes measures that address traffic flow through the Valley, the use of alternatively fueled city vehicles and refueling stations, and rideshare programs, among others that address the city's commitment to reducing regional smog. Two bullet lists follow which provide potential additional mitigation measures that specifically address impacts from the issues of PM10 fugitive dust associated with growth and diesel mobile source emissions from the development of the Soledad Canyon mining site.

7.1 Potential Mitigation Measures for PM10 Fugitive Dust

Rule 403-Fugitive Dust provides a comprehensive list of dust control measures. Required control measures and recommended guidance measures that go beyond the requirements of Rule 403 can be implemented to mitigate fugitive dust emissions during construction and operation of aggregate handling facilities. For example, where Rule 403 identifies an option for implementing several control measures, mitigation measures can include several or all of the control measures and recommended guidance. In addition, mitigation measures can also include increasing the frequency of measures, such as watering, to go beyond the recommended guidance under Rule 403.

- Installation of monitoring devices around perimeter of site to collect samples during the construction and operation of the project to ensure that the PM10 levels do not exceed $50 \mu\text{g}/\text{m}^3$ pursuant to requirements under Rule 403.
- Signs posted with a phone number for the public to report dust problems.
- Apply water three times daily, or non-toxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas or unpaved road surfaces (compared to watering twice daily as the minimum required by Rule 403).
- Pave construction roads that have a traffic volume of more than 50 daily trips by construction equipment, 150 total daily trips for all vehicles (compared to watering twice daily as the minimum required by Rule 403).
- Pave all construction access roads at least 100 feet onto the site from the main road (for sites ≤ 5 acres or ≤ 100 cubic yards daily import/export of bulk material).

- Pave construction roads that have a daily traffic volume of more than 50 vehicular trips (compared to watering twice daily as the minimum required by Rule 403).

7.2 Potential Mitigation from Diesel Mobile Sources

- Use of aftertreatment control technologies such as diesel oxidation catalysts.
- Use of alternative diesel fuels such as emulsified diesel fuel.
- Provide a minimum buffer zone of 300 meters between truck traffic and/or and sensitive receptors.
- Re-route truck traffic by adding direct off-ramps for the truck traffic or by restricting truck traffic on certain sensitive routes.
- Improve traffic flow by signal synchronization.
- Enforce truck parking restrictions.
- Develop park-and-ride programs.
- Restrict truck engine idling.
- Restrict operation to “clean” trucks.
- Provide electrical hook-ups for trucks that need to cool their load.
- Electrify auxiliary power units.
- Provide onsite services to minimize truck traffic in or near residential areas, including, but not limited to, the following services: meal or cafeteria service, automated teller machines, etc.
- Require or provide incentives to use low-sulfur diesel fuel with particulate traps.
- Conduct air quality monitoring at sensitive receptors.

Nonattainment Areas



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Nonattainment Areas

1-Hour Ozone

8-Hour Ozone

Carbon Monoxide

Nitrogen Dioxide

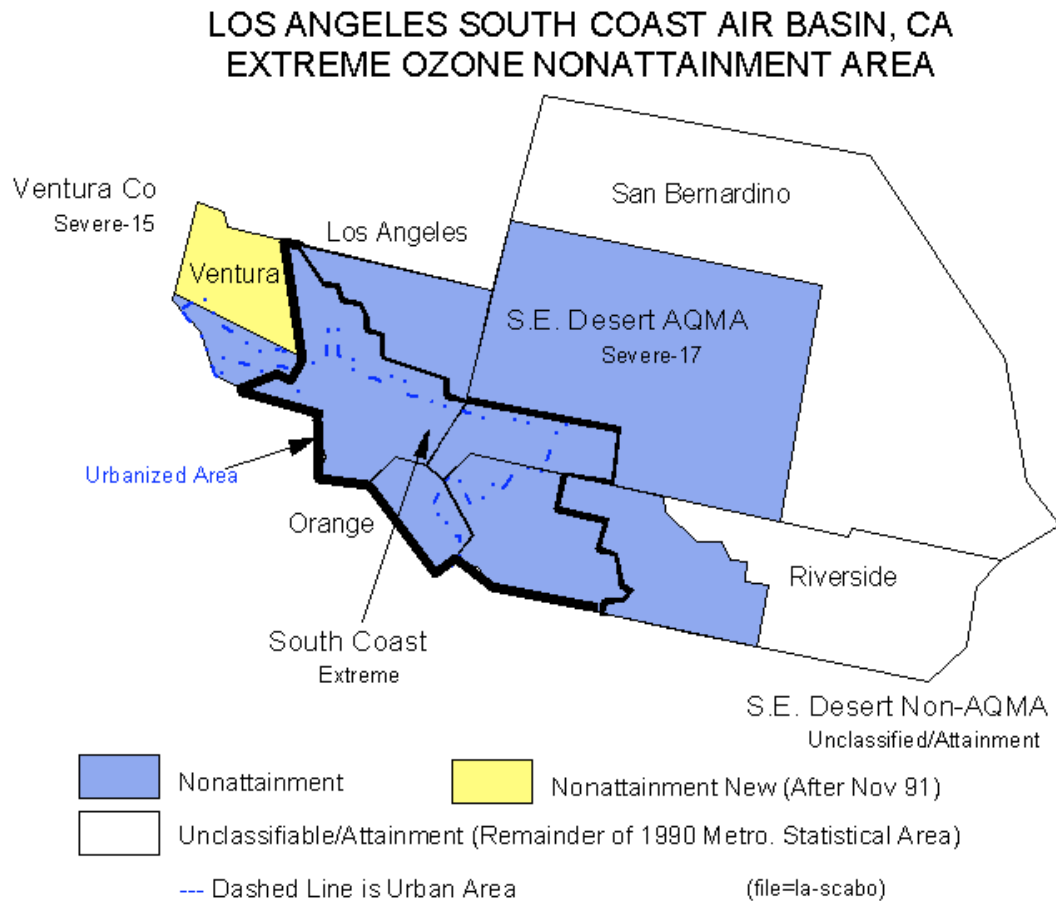
Sulfur Dioxide

PM-10

PM-2.5

Lead

1-Hour Ozone Nonattainment Area Map



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Nonattainment Areas

1-Hour Ozone
8-Hour Ozone
Carbon Monoxide
Nitrogen Dioxide
Sulfur Dioxide
Particulate Matter
Lead

8-Hour Ozone Areas Listed by Category/Classification

As of September 27, 2004

n = area has whole or part county or counties in a current 1-hr Ozone nonattainment area

m = area has whole or part county or counties in a current 1-hr Ozone maintenance area

* = area has whole or part county or counties in 1-hr Ozone, CO, or PM-10 NAA or maintenance area

Category/Classification (Attainment Date)

SEVERE 17 (June 2021)
Los Angeles South Coast Air Basin, CA [n*]
SERIOUS (June 2013)
Riverside Co. (Coachella Valley), CA [n*]
Sacramento Metro, CA [n*]
San Joaquin Valley, CA [n*]
MODERATE (June 2010)
Baltimore, MD [n*]
Boston-Lawrence-Worcester (E. MA), MA [n*]
Boston-Manchester-Portsmouth(SE), NH [n*]
Cass Co., MI
Charlotte-Gastonia-Rock Hill, NC-SC [m*]
Chicago-Gary-Lake County, IL-IN [n*]
Cleveland-Akron-Lorain, OH [m*]
Dallas-Fort Worth, TX [n*]
Detroit-Ann Arbor, MI [m*]
Fredericksburg, VA [n*]
Greater Connecticut, CT [n*]
Houston-Galveston-Brazoria, TX [n*]
Jefferson Co., NY [n*]
Kent and Queen Anne's Cos., MD [n*]
La Porte, TN
Lancaster, PA [n*]
Los Angeles-San Bernardino Cos (W Mojave), CA [n*]
Memphis, TN-AR [m*]
Milwaukee-Racine, WI [n*]
Muskegon, MI [m*]
New York-N. New Jersey-Long Island, NY-NJ-CT [n*]
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE [n*]
Poughkeepsie, NY [n*]
Providence (All RI), RI [n*]
Richmond-Petersburg, VA [m*]
Sheboygan, WI [m*]
Springfield (Western MA), MA [n*]
St. Louis, MO-IL [m*]
Ventura Co., CA [n*]
Washington, DC-MD-VA [n*]
MARGINAL (June 2007)
Atlanta, GA [n*]
Baton Rouge, LA [n*]
Beaumont-Port Arthur, TX [n*]
Imperial Co., CA [n*]
Norfolk-Virginia Beach-Newsport News (HR), VA [m*]
Portland, ME [n*]
San Francisco Bay Area, CA [n*]
SUBPART 1 (June 2009)
Albany-Schenectady-Troy, NY [n*]
Allagan Co., MI [m*]
Allentown-Bethlehem-Easton, PA [n*]
Altoona, PA [n*]
Amdor and Calaveras Cos (Central Mtn.), CA
Benton Harbor, MI
Benzie Co., MI
Birmingham, AL [m*]
Buffalo-Niagara Falls, NY [n*]
Canton-Massillon, OH [m*]
Charleston, WV [m*]
Chico, CA [n*]
Cincinnati-Hamilton, OH-KY-IN [m*]
Clarksville-Hopkinsville, TN-KY
Clearfield and Indiana Cos., PA
Columbus, OH [m*]
Dayton-Springfield, OH [m*]
Deer Co., WI [m*]
Essex, PA [n*]
Essex Co (Whiteface Mtn), NY [n*]
Evansville, IN [m*]
Flint, MI [m*]
Fort Wayne, IN
Franklin Co., PA [n*]
Grand Rapids, MI [m*]
Greene Co., IN
Greene Co., PA [n*]
Hancock, Knox, Lincoln & Waldo Cos., ME [m*]
Harrisburg-Lebanon-Carlisle, PA [n*]
Havwood and Swain Cos (Great Smoky NP), NC
Huntington-Ashland, WV-KY [m*]
Huron Co., MI
Indianapolis, IN [m*]
Jackson Co., TN
Jamestown, NY
Johnstown, PA [n*]
Kalamazoo-Battle Creek, MI
Kern Co (Eastern Kern), CA [m*]
Kewaunee Co., WI [m*]
Knoxville, TN [m*]
Lansing-East Lansing, MI
Las Vegas, NV [*]
Lima, OH
Louisville, KY-IN [m*]
Macon, GA
Madison and Rapa Cos (Shenandoah NP), VA
Manitowish Co., WI [m*]
Mariposa and Tuolumne Cos (Southern Mtn), CA

Mason Co., MI
Muncie, IN
Murray Co. (Chattahoochee Nat. Forest), GA
Nevada Co. (Western Part), CA
Parkersburg-Marietta, WV-OH [m*]
Phoenix-Mesa, AZ [n*]
Pittsburgh-Beaver Valley, PA [m*]
Raleigh-Durham-Chapel Hill, NC [m*]
Reading, PA [m*]
Rochester, NY
Rocky Mount, NC
San Diego, CA [m*]
Scranton-Wilkes-Barre, PA [m*]
South Bend-Elkhart, IN [m*]
State College, PA
Staubenville-Melton, OH-WV [m*]
Sutter Co. (Sutter Buttes), CA [n*]
Terre Haute, IN
Tioga Co., PA
Toledo, OH [m*]
Wheeling, WV-OH
York, PA [n*]
Yonkstown-Warren-Sharon, OH-PA [m*]
MODERATE EAC (December 2007)
Greensboro-Winston Salem-High Point, NC [m*]
SUBPART 1 EAC (December 2007)
Berkeley and Jefferson Counties, WV
Chattanooga, TN-GA
Columbia, SC
Denver-Boulder-Greeley-Ft. Collins-Love, CO [m*]
Fayetteville, NC
Frederick Co., VA
Greenville-Spartanburg-Anderson, SC
Hickory-Morganton-Lenoir, NC
Johnson City-Kingsport-Bristol, TN
Nashville, TN [m*]
Roanoke, VA
San Antonio, TX
Washington Co. (Hagerstown), MD

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Nonattainment Areas

1-Hour Ozone

8-Hour Ozone

Carbon Monoxide

Nitrogen Dioxide

Sulfur Dioxide

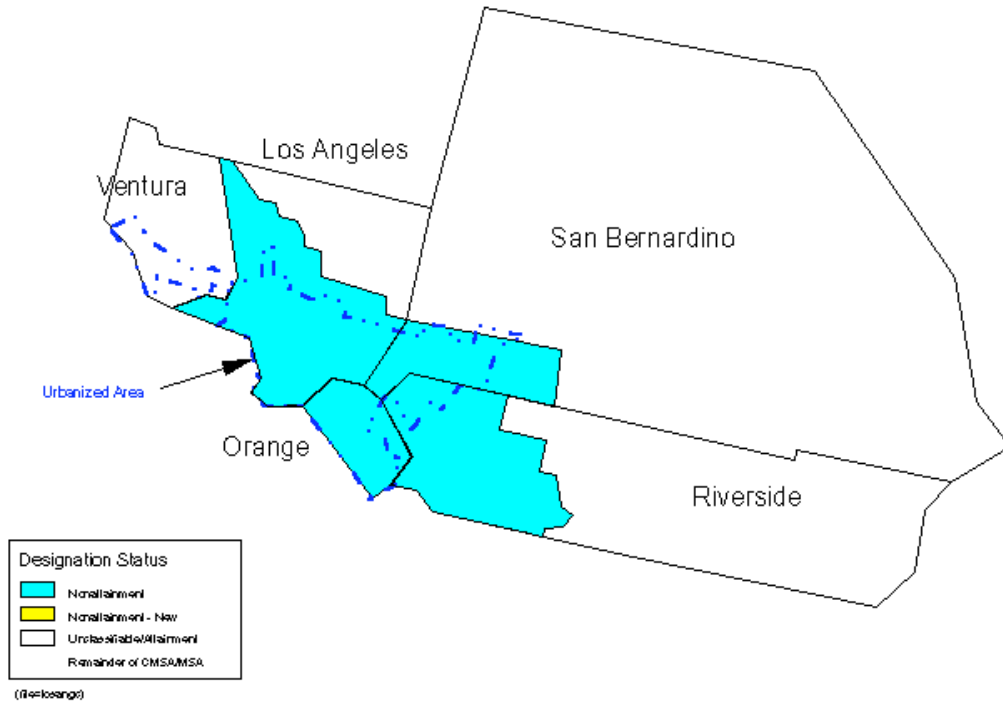
PM-10

PM-2.5

Lead

Carbon Monoxide Nonattainment Area Map

LOS ANGELES-SOUTH COAST AIR BASIN, CA SERIOUS CARBON MONOXIDE NONATTAINMENT AREA



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Nonattainment Areas

1-Hour Ozone

8-Hour Ozone

Carbon Monoxide

Nitrogen Dioxide

Sulfur Dioxide

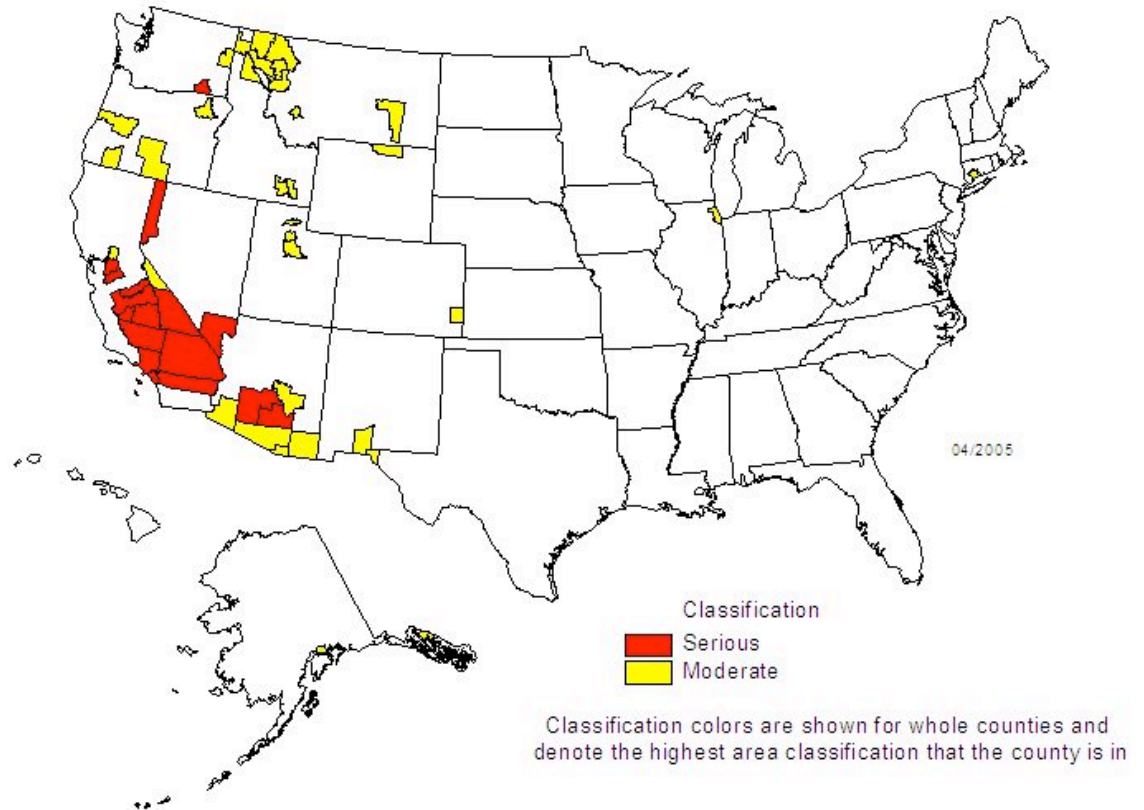
PM-10

PM-2.5

Lead

Particulate Matter Nonattainment Area Map

Counties Designated Nonattainment for PM-10





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Particulate Matter Nonattainment Areas

As of September 27, 2004

Areas Listed Alphabetically	Classification	No. Counties NAA	Pop (1,000)	EPA Region	State
Ajo (Pima County), AZ	Moderate	1	8	9	AZ
Anthony, NM	Moderate	1	3	6	NM
Banner Co. (Sandoz), ID	Moderate	1	37	10	ID
Baker, MT	Moderate	1	35	8	MT
Clark Co., NV	Serious	1	1376	9	NV
Coachella Valley, CA	Serious	1	182	9	CA
Columbia Falls, MT	Moderate	1	4	8	MT
Coso Junction, CA	Moderate	1	7	9	CA
Douglas (Cochise County), AZ	Moderate	1	16	9	AZ
Eagle River, AK	Moderate	1	195	10	AK
El Paso Co., TX	Moderate	1	564	6	TX
Eureka-Springfield, OR	Moderate	1	179	10	OR
Flathead County, Whitefish and vicinity, MT	Moderate	1	5	8	MT
Fort Hall Reservation, ID	Moderate	2	1	10	ID
Hayden/Miami, AZ	Moderate	2	4	9	AZ
Imperial Valley, CA	Serious	1	120	9	CA
Juntura, AK	Moderate	1	14	10	AK
Kalamazoo, MI	Moderate	1	15	6	MI
LaGrande, OR	Moderate	1	12	10	OR
Lake Co., OR	Moderate	1	3	10	OR
Lamar, CO	Moderate	1	9	8	CO
Lane Deer, MT	Moderate	1	1	8	MT
Lane Co., OR	Moderate	1	3	10	OR
Libby, MT	Moderate	1	3	8	MT
Los Angeles South Coast Air Basin, CA	Serious	4	14594	9	CA
Lyons Twp., IL	Moderate	1	109	5	IL
Madford-Ashland, OR	Moderate	1	78	10	OR
Marietta, MT	Moderate	1	52	8	MT
Mesa Basin, CA	Moderate	1	0	9	CA
Mtn. of Guaymas, PR	Moderate	1	92	2	PR
New Haven Co., CT	Moderate	1	124	1	CT
New York Co., NY	Moderate	1	1537	2	NY
Nogales, AZ	Moderate	1	25	9	AZ
Ogden, UT	Moderate	1	77	8	UT
Ogden, UT	Serious	1	7	9	CA
Osage Valley, CA	Moderate	1	1	9	AZ
Paul Smith, AZ	Serious	2	3112	9	AZ
Phoenix, AZ	Moderate	1	2	10	ID
Pinehurst, ID	Moderate	1	4	8	MT
Polson, MT	Moderate	2	66	10	ID
Portneuf Valley, ID	Moderate	1	1	9	AZ
Rillito, AZ	Moderate	1	3	8	MT
Ronan, MT	Moderate	1	1223	9	CA
Sacramento Co., CA	Moderate	1	898	8	UT
Salt Lake Co., UT	Moderate	1	199	9	CA
San Bernardino Co., CA	Serious	7	3080	9	CA
San Joaquin Valley, CA	Moderate	1	1	8	MT
Sanders County (part)/Thompson Falls and vicinity, MT	Moderate	1	16	8	WY
Sheridan, WY	Moderate	1	10	10	ID
Shoshone Co., ID	Moderate	1	3	5	IL
Southeast Chicago, IL	Moderate	1	205	10	WA
Stockton Co., WA	Moderate	1	10	8	CO
Steamboat Springs	Moderate	1	4	9	CA
Trois, CA	Moderate	1	369	8	UT
Utah Co., UT	Serious	1	0	10	WA
Wallula, WA	Serious	1	339	9	NV
Washoe Co., NV	Serious	2	15	3	WV
Watkins, WV	Moderate	1	64	10	WA
Yakima Co., WA	Moderate	1	82	9	AZ
Yuma, AZ	Moderate	1			

59 Total Areas

58 29,198

No. of Counties NAA reflects the number of counties in the NAA, while the total count accounts for more than one area being in a county.

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URL: <http://www.epa.gov/air/oaqps/greenbk/pmtc.html>

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Unmitigated Construction Emissions

Project Name River Village Unmitigated Emissions
 Subphase Weeks 1 thru 19
 Length of Subphase (weeks) 19.00
 Year 2006
 Total Acreage 120.28

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust		—	—	—	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Grading Subphase							
FugitiveDust	—	—	—	—	19,407.42	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	130.69	182.74	18.98	1.69	3.30		
Off-Road Diesel Exhaust	1,841.01	226.11	1,521.55	—	65.65		
Worker Commute Trips	15.58	1.71	2.90	0.02	0.11		
Mitigation/Reduction							
Fugitive Dust	—	—	—	—	9,703.71	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	—	0.00	—	—	—	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	—	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Architectural Painting							
Off-Gas Emissions	—	0.00	—	—	—		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction						No Building Construction During This Subphase	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Net Emission Totals:	1,987.28	410.56	1,543.43	1.72	9,772.76		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	Yes		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 20 thru 39
 Length of Subphase (weeks) 20.00
 Year 2006
 Total Acreage 126.61

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	130.69	182.74	18.98	1.69	19,393.70	Fugitive Dust Rule 403
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	—	65.65	
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	0.11	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	—	46.72	Fugitive Dust Rule 403
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	23.98	2.86	12.29	0.11	0.28	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403
Net Emission Totals:	3,368.20	582.35	2,688.18	1.88	9,813.02	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 40 thru 46
 Length of Subphase (weeks) 7.00
 Year 2006
 Total Acreage 44.31

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	130.69	182.74	18.98	1.69	19,407.42	Fugitive Dust Rule 403
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	0.02	3.30	
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	65.65	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.11	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	9,703.71	Fugitive Dust Rule 403
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	12.27	1.35	2.28	0.02	0.09	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	1,682.38	222.74	1,654.08	0.04	72.90	
Off-Road Diesel Exhaust	25.51	2.80	4.75	0.04	0.18	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	25.51	2.80	4.75	0.04	0.18	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	5,089.89	960.19	4,341.75	1.86	9,892.94	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 47 thru 91
 Length of Subphase (weeks) 45.00
 Year 2006
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	21.98	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	10.99	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	12.27	1.35	2.28	0.02	0.09	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	222.74	1,654.08	0.04	72.90	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions	151.01	151.01	151.01	0.04	0.18	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	3,102.61	549.63	2,798.32	0.15	131.16	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Week 92
 Length of Subphase (weeks) 1.00
 Year 2007
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	1,373.05	167.28	1,085.87	0.01	41.93		
Off-Road Diesel Exhaust Emissions	4.05	0.61	5.80	0.01	0.10		
On-Road Diesel Exhaust Emissions	11.29	1.25	2.11	0.01	0.08		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	2,159.16	275.61	1,931.00	0.02	79.99		
Worker Commute Trips	28.13	3.11	5.26	0.02	0.21		
Architectural Painting							
Off-Gas Emissions	151.50	15.15	101.00	0.02	3.99		
Worker Commute Trips	28.13	3.11	5.26	0.02	0.21		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	3,603.81	603.46	3,035.29	0.06	122.52		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 93 thru 144
 Length of Subphase (weeks) 52.00
 Year 2007
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	--	--	--	--	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	--	--	--	--	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	--	--	--	--	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	--	0.02	--	--	--		
Off-Road Diesel Exhaust Emissions	1,373.05	167.28	1,085.87	--	41.93		
On-Road Diesel Exhaust Emissions	0.08	0.01	0.11	0.00	0.00		
Worker Commute Emissions	11.29	1.25	2.11	0.01	0.08		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,872.07	240.07	1,693.55	--	70.48		
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18		
Architectural Painting							
Off-Gas Emissions	--	141.73	--	--	--		
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	3,306.30	555.86	2,790.95	0.05	112.86		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 145 thru 158
 Length of Subphase (weeks) 14.00
 Year 2008
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	1,385.56	167.28	1,058.35	0.01	38.46		
Off-Road Diesel Exhaust Emissions	3.70	0.57	5.39	0.01	0.10		
On-Road Diesel Exhaust Emissions	10.38	1.15	1.94	0.01	0.08		
Worker Commute Emissions							
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,685.60	212.51	1,433.80	0.02	58.55		
Worker Commute Trips	20.77	2.30	3.89	0.02	0.17		
Architectural Painting							
Off-Gas Emissions		141.66					
Worker Commute Trips	20.77	2.30	3.89	0.02	0.17		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
	3,126.78	528.79	2,527.25	0.05	97.52		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 159 thru 178
 Length of Subphase (weeks) 21.00
 Year 2009
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,726.62	212.51	1,394.91	0.00	53.47		
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17		
Architectural Painting							
Off-Gas Emissions	0.00	141.66	0.00	0.00	0.00		
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
	1,764.79	358.43	1,402.06	0.03	53.80		
SCAQMD Threshold:							
	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?							
	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 179 thru 196
 Length of Subphase (weeks) 18.00
 Year 2009
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,515.09	187.20	1,239.14	0.00	48.23		
Worker Commute Trips	17.12	1.91	3.21	0.02	0.15		
Architectural Painting							
Off-Gas Emissions	0.00	141.24	0.00	0.00	0.00		
Worker Commute Trips	17.12	1.91	3.21	0.02	0.15		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
	1,549.32	332.26	1,245.55	0.03	48.53		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 197 thru 210
 Length of Subphase (weeks) 13.00
 Year 2009
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust					0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	--	--	--	--	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	--	--	--	--	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	--	0.00	--	--		No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	--	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,041.33	128.61	850.48	--	33.06		
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10		
Architectural Painting							
Off-Gas Emissions	--	87.64	--	--	--		
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
	1,064.36	218.82	854.79	0.02	33.26		
SCAQMD Threshold:							
	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?							
	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 211 thru 220
 Length of Subphase (weeks) 10.00
 Year 2010
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	779.57	93.89	593.66	0.01	21.89		
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07		
Architectural Painting							
Off-Gas Emissions	0.00	39.26	0.00	0.00	0.00		
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	794.57	134.83	596.44	0.01	22.03		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 221 thru 235
 Length of Subphase (weeks) 15.00
 Year 2010
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	491.65	59.17	372.96	0.01	13.64		
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04		
Architectural Painting							
Off-Gas Emissions	0.00	11.78	0.00	0.00	0.00		
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	500.54	71.95	374.61	0.01	13.72		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	No	No	Yes	No	No		

River Village Office Construction Only Unmitigated Emissions

Weeks of Construction: 140

Year Constr. Begins: 2015

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	884.12	106.21	665.11	--	23.88	
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08	
Architectural Painting						
Off-Gas Emissions	--	38.48	--	--	--	
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	905.93	147.09	669.17	0.03	24.03	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Unmitigated Construction Emissions

Project Name River Village Unmitigated Emissions
 Subphase Weeks 1 thru 19
 Length of Subphase (weeks) 19.00
 Year 2006
 Total Acreage 120.28

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	130.69	182.74	18.98	1.69	19,407.42	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	—	65.65		
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	0.11		
Worker Commute Trips	—	—	—	—	—		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Architectural Painting							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase	
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	1,987.28	410.56	1,543.43	1.72	9,772.76		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	Yes		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 20 thru 39
 Length of Subphase (weeks) 20.00
 Year 2006
 Total Acreage 126.61

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	130.69	182.74	18.98	1.69	19,393.70	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	—	65.65		
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	0.11		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	—	46.72	Fugitive Dust Rule 403	
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11		
On-Road Diesel Exhaust Emissions	23.98	2.86	12.29	0.11	0.28		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Architectural Painting							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	Yes		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 40 thru 46
 Length of Subphase (weeks) 7.00
 Year 2006
 Total Acreage 44.31

 Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
FugitiveDust	130.69	182.74	18.98	1.69	19,407.42	Fugitive Dust Rule 403
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	0.02	3.30	
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	65.65	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.11	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	9,703.71	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	12.27	1.35	2.28	0.02	0.09	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	222.74	1,654.08	0.04	72.90	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions	25.51	151.01	4.75	0.04	0.18	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	5,089.89	960.19	4,341.75	1.86	9,892.94	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 47 thru 91
 Length of Subphase (weeks) 45.00
 Year 2006
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	21.98	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	10.99	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	12.27	1.35	2.28	0.02	0.09	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	222.74	1,654.08	0.04	72.90	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions	151.01	151.01	0.00	0.00	0.00	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	3,102.61	549.63	2,798.32	0.15	131.16	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Week 92
 Length of Subphase (weeks) 1.00
 Year 2007
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	1,373.05	167.28	1,085.87	41.93			
Off-Road Diesel Exhaust Emissions	4.05	0.61	5.80	0.01	0.10		
On-Road Diesel Exhaust Emissions	11.29	1.25	2.11	0.01	0.08		
Worker Commute Emissions							
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	2,159.16	275.61	1,931.00	79.99			
Worker Commute Trips	28.13	3.11	5.26	0.02	0.21		
Architectural Painting							
Off-Gas Emissions		151.50					
Worker Commute Trips	28.13	3.11	5.26	0.02	0.21		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	3,603.81	603.46	3,035.29	0.06	122.52		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 93 thru 144
 Length of Subphase (weeks) 52.00
 Year 2007
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	--	--	--	--	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	--	--	--	--	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	--	--	--	--	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	--	0.02	--	--	--		
Off-Road Diesel Exhaust Emissions	1,373.05	167.28	1,085.87	--	41.93		
On-Road Diesel Exhaust Emissions	0.08	0.01	0.11	0.00	0.00		
Worker Commute Emissions	11.29	1.25	2.11	0.01	0.08		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,872.07	240.07	1,693.55	--	70.48		
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18		
Architectural Painting							
Off-Gas Emissions	--	141.73	--	--	--		
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	3,306.30	555.86	2,790.95	0.05	112.86		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 145 thru 158
 Length of Subphase (weeks) 14.00
 Year 2008
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	1,385.56	167.28	1,058.35	0.01	38.46		
Off-Road Diesel Exhaust Emissions	3.70	0.57	5.39	0.01	0.10		
On-Road Diesel Exhaust Emissions	10.38	1.15	1.94	0.01	0.08		
Worker Commute Emissions							
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,685.60	212.51	1,433.80	0.02	58.55		
Worker Commute Trips	20.77	2.30	3.89	0.02	0.17		
Architectural Painting							
Off-Gas Emissions		141.66					
Worker Commute Trips	20.77	2.30	3.89	0.02	0.17		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
	3,126.78	528.79	2,527.25	0.05	97.52		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 159 thru 178
 Length of Subphase (weeks) 21.00
 Year 2009
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,726.62	212.51	1,394.91	0.02	53.47	
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17	
Architectural Painting						
Off-Gas Emissions	19.09	141.66	3.58	0.02	0.17	
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	1,764.79	358.43	1,402.06	0.03	53.80	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 179 thru 196
 Length of Subphase (weeks) 18.00
 Year 2009
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,515.09	187.20	1,239.14	0.00	48.23		
Worker Commute Trips	17.12	1.91	3.21	0.02	0.15		
Architectural Painting							
Off-Gas Emissions	0.00	141.24	0.00	0.00	0.00		
Worker Commute Trips	17.12	1.91	3.21	0.02	0.15		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	1,549.32	332.26	1,245.55	0.03	48.53		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 197 thru 210
 Length of Subphase (weeks) 13.00
 Year 2009
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust					0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	--	--	--	--	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	--	--	--	--	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	--	0.00	--	--		No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	--	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,041.33	128.61	850.48	--	33.06		
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10		
Architectural Painting							
Off-Gas Emissions	--	87.64	--	--	--		
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
	1,064.36	218.82	854.79	0.02	33.26		
SCAQMD Threshold:							
	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?							
	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 211 thru 220
 Length of Subphase (weeks) 10.00
 Year 2010
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	779.57	93.89	593.66	0.01	21.89		
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07		
Architectural Painting							
Off-Gas Emissions	0.00	39.26	0.00	0.00	0.00		
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
	794.57	134.83	596.44	0.01	22.03		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 221 thru 235
 Length of Subphase (weeks) 15.00
 Year 2010
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	491.65	59.17	372.96	0.01	13.64		
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04		
Architectural Painting							
Off-Gas Emissions	0.00	11.78	0.00	0.00	0.00		
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	500.54	71.95	374.61	0.01	13.72		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	No	No	Yes	No	No		

River Village Office Construction Only Unmitigated Emissions

Weeks of Construction: 140

Year Constr. Begins: 2015

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Grading Subphase							
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	884.12	106.21	668.11	--	23.88		
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08		
Architectural Painting							
Off-Gas Emissions	--	38.48	--	--	--		
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

2002

**Annual Average Daily Truck Traffic
on the
California State Highway System**

Compiled by
Traffic and Vehicle Data Systems

State of California
Business, Transportation and Housing Agency
Department of Transportation

Prepared in cooperation with the
U.S. Department of Transportation
Federal Highway Administration

FEBRUARY 2004

RTE	DIST	CNTY	POST MILE	L E G	DESCRIPTION	VEHICLE	TRUCK	TRUCK	TRUCK				% TRUCK				EAL 1-WAY (1000)	YEAR VER/ EST
						AADT TOTAL	AADT TOTAL	% TOT VEH	----- 2	By 3	Axle 4	TOTAL 5+	----- 2	By 3	Axle 4	TOTAL 5+		
126	07	VEN	.001	A	JCT RTE 101	43500	1927	4.43	871	140	61	855	45.19	7.29	3.14	44.39	347	02E
126	07	VEN	1.448	A	VICTORIA AVENUE	44500	3204	7.2	1426	333	103	1342	44.5	10.4	3.2	41.9	559	92V
126	07	VEN	5.031	B	JCT. RTE. 118 EAST	36000	1944	5.4	878	142	61	863	45.19	7.29	3.14	44.39	350	02E
126	07	VEN	R5.031	A	JCT. RTE. 118 EAST	50000	2465	4.93	1114	180	77	1094	45.19	7.29	3.14	44.39	444	02E
126	07	VEN	R10.629	O	LAURIE LANE PED OC; E/O PECK RD	39500	2263	5.73	1023	165	71	1005	45.19	7.29	3.14	44.39	408	02V
126	07	VEN	R12.042	B	JCT. RTE. 150 NORTH	35000	2219	6.34	935	153	66	1066	42.13	6.89	2.96	48.02	424	02E
126	07	VEN	R12.042	A	JCT. RTE. 150 NORTH	28500	2551	8.95	997	166	71	1318	39.08	6.5	2.77	51.65	515	02E
126	07	VEN	21.137	B	FILLMORE, JCT. RTE. 23 SOUTH	29500	2859	9.69	1030	174	74	1580	36.03	6.1	2.59	55.28	608	02E
126	07	VEN	21.137	A	FILLMORE, JCT. RTE. 23 SOUTH	28500	2745	9.63	905	157	66	1617	32.97	5.71	2.41	58.91	614	02E
126	07	VEN	R30.8	O	PIRU	19600	2824	14.41	845	150	63	1766	29.92	5.31	2.23	62.54	662	02V
126	07	LA	R0	A	VENTURA/LOS ANGELES COUNTY LINE	19600	4296	21.92	644	1379	185	2088	14.99	32.1	4.31	48.6	897	90E
126	07	LA	R5.801	B	WEST OF NORTH JCT RTE 5	23700	2953	12.46	884	157	66	1847	29.92	5.31	2.23	62.54	692	02E

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	78.83	31.65	21.52	0.17	0.08
TOTALS (lbs/day, mitigated)	77.29	26.13	10.61	0.00	0.05

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	342.42	391.84	4,155.89	2.47	377.33
TOTALS (lbs/day, mitigated)	342.41	391.82	4,155.68	2.47	377.31

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	421.25	423.49	4,177.40	2.65	377.40
TOTALS (lbs/day, mitigated)	419.69	417.94	4,166.29	2.47	377.36

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	2.40	31.52	13.20	-	0.06
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.97	0.13	8.32	0.17	0.02
Consumer Prdcts	75.46	-	-	-	-
TOTALS (lbs/day, unmitigated)	78.83	31.65	21.52	0.17	0.08

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	56.31	60.90	669.83	0.39	59.43
Apartments low rise	32.54	32.68	359.42	0.21	31.89
Condo/townhouse general	31.93	33.14	364.51	0.21	32.34
Elementary school	20.51	10.98	116.55	0.07	10.66
City park	0.71	0.49	5.16	0.00	0.47
Commercial Center 10-30 ac	91.46	120.96	1,259.13	0.76	115.66
Commercial Center <10 ac.	42.72	57.47	598.28	0.36	54.96
Commercial Shops	2.41	3.13	32.54	0.02	2.99
Commercial Office	63.82	72.09	750.48	0.45	68.94
TOTAL EMISSIONS (lbs/day)	342.42	391.84	4,155.89	2.47	377.33

Does not include correction for passby trips.
Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.90 trips / dwelling units	591.00	5,850.90
Apartments low rise	6.90 trips / dwelling units	455.00	3,139.50
Condo/townhouse general	8.00 trips / dwelling units	398.00	3,184.00
Elementary school	1.45 trips / students	750.00	1,087.50
City park	2.60 trips / acres	20.90	54.34
Commercial Center 10-30 ac	54.06 trips / 1000 sq. ft.	252.00	13,623.12
Commercial Center <10 ac.	85.06 trips / 1000 sq. ft.	76.10	6,473.07
Commercial Shops	37.06 trips / 1000 sq. ft.	9.50	352.07
Commercial Office	11.56 trips / 1000 sq. ft.	702.40	8,119.74

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
City park				5.0	2.5	92.5
Commercial Center 10-30 ac.				2.0	1.0	97.0
Commercial Center <10 ac.				2.0	1.0	97.0
Commercial Shops				2.0	1.0	97.0
Commercial Office				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The area source mitigation measure option switch changed from off to on.
The natural gas residential percentage changed from 60 to 100.
The percentage of wood stoves changed from 35 to 0.
The landscape length of the summer period (in days) changed from 180 to 365.
The landscape year changed from 2004 to 2007.
The consumer product persons per residential unit changed from 2.861 to 3.056.
Mitigation measure Orient Buildings North/South: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Rsdntl Lndscp Maint.
has been changed from off to on.
Mitigation measure Central Water Heater: Cmrc1 Space Heat.
has been changed from off to on.
Mitigation measure Orient Buildings North/South: Cmrc1 Space Heat.
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has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Cmrc1 Lndscp Maint.
has been changed from off to on.

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2007.
The double counting internal work trip limit changed from to 791.577.
The double counting shopping trip limit changed from to 395.7885.
The double counting other trip limit changed from to 5234.992.
The travel mode environment settings changed from both to: both
Mitigation measure Mixed Use Project (Residential Oriented):3
has been changed from off to on.
Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1
has been changed from off to on.
Mitigation measure Provide Direct Pedestrian Connections:1
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety:0.5
has been changed from off to on.
Mitigation measure Provide Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Signalization and Signage:0.5
has been changed from off to on.
Mitigation measure Mixed Use Project (Commercial Oriented):1
has been changed from off to on.
Mitigation measure Floor Area Ratio 0.75 or Greater:1
has been changed from off to on.
Mitigation measure Provide Wide Sidewalks and Onsite Pedestrian Facilities:1
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Project Provides Shade Trees to Shade Sidewalks:0.5
has been changed from off to on.
Mitigation measure Project Provides Street Art and/or Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety Designs/Infrastructure at Crossings:0.5
has been changed from off to on.
Mitigation measure Articulated Storefront(s) Display Windows with Visual Interest:0.25
has been changed from off to on.
Mitigation measure No Long Uninterrupted Walls Along Pedestrian Walkways:0.25
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Secure Bicycle Parking:1
has been changed from off to on.
Mitigation measure Provide Employee Lockers and Showers:1
has been changed from off to on.
Mitigation measure Shuttle Bus Service to Transit/Multi-Modal Center:2
has been changed from off to on.
Mitigation measure Preferential Carpool/Vanpool Parking:1.5
has been changed from off to on.
Mitigation measure Many Frequently Needed Services Provided:5

has been changed from off to on.

Mitigation measuremitop5: Park and Ride Lots
has been changed from on to off.

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	78.83	31.65	21.52	0.17	0.08
TOTALS (lbs/day, mitigated)	77.29	26.13	10.61	0.00	0.05

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	342.42	391.84	4,155.89	2.47	377.33
TOTALS (lbs/day, mitigated)	342.41	391.82	4,155.68	2.47	377.31

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	421.25	423.49	4,177.40	2.65	377.40
TOTALS (lbs/day, mitigated)	419.69	417.94	4,166.29	2.47	377.36

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	2.40	31.52	13.20	-	0.06
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.97	0.13	8.32	0.17	0.02
Consumer Prdcts	75.46	-	-	-	-
TOTALS (lbs/day, unmitigated)	78.83	31.65	21.52	0.17	0.08

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	56.31	60.90	669.83	0.39	59.43
Apartments low rise	32.54	32.68	359.42	0.21	31.89
Condo/townhouse general	31.93	33.14	364.51	0.21	32.34
Elementary school	20.51	10.98	116.55	0.07	10.66
City park	0.71	0.49	5.16	0.00	0.47
Commercial Center 10-30 ac	91.46	120.96	1,259.13	0.76	115.66
Commercial Center <10 ac.	42.72	57.47	598.28	0.36	54.96
Commercial Shops	2.41	3.13	32.54	0.02	2.99
Commercial Office	63.82	72.09	750.48	0.45	68.94
TOTAL EMISSIONS (lbs/day)	342.42	391.84	4,155.89	2.47	377.33

Does not include correction for passby trips.
Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.90 trips / dwelling units	591.00	5,850.90
Apartments low rise	6.90 trips / dwelling units	455.00	3,139.50
Condo/townhouse general	8.00 trips / dwelling units	398.00	3,184.00
Elementary school	1.45 trips / students	750.00	1,087.50
City park	2.60 trips / acres	20.90	54.34
Commercial Center 10-30 ac	54.06 trips / 1000 sq. ft.	252.00	13,623.12
Commercial Center <10 ac.	85.06 trips / 1000 sq. ft.	76.10	6,473.07
Commercial Shops	37.06 trips / 1000 sq. ft.	9.50	352.07
Commercial Office	11.56 trips / 1000 sq. ft.	702.40	8,119.74

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
City park				5.0	2.5	92.5
Commercial Center 10-30 ac.				2.0	1.0	97.0
Commercial Center <10 ac.				2.0	1.0	97.0
Commercial Shops				2.0	1.0	97.0
Commercial Office				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The area source mitigation measure option switch changed from off to on.
The natural gas residential percentage changed from 60 to 100.
The percentage of wood stoves changed from 35 to 0.
The landscape length of the summer period (in days) changed from 180 to 365.
The landscape year changed from 2004 to 2007.
The consumer product persons per residential unit changed from 2.861 to 3.056.
Mitigation measure Orient Buildings North/South: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Rsdntl Lndscp Maint.
has been changed from off to on.
Mitigation measure Central Water Heater: Cmrc1 Space Heat.
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Mitigation measure Orient Buildings North/South: Cmrc1 Space Heat.
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Changes made to the default values for Operations

The operational emission year changed from 2004 to 2007.
The double counting internal work trip limit changed from to 791.577.
The double counting shopping trip limit changed from to 395.7885.
The double counting other trip limit changed from to 5234.992.
The travel mode environment settings changed from both to: both
Mitigation measure Mixed Use Project (Residential Oriented):3
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Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1
has been changed from off to on.
Mitigation measure Provide Direct Pedestrian Connections:1
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety:0.5
has been changed from off to on.
Mitigation measure Provide Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Signalization and Signage:0.5
has been changed from off to on.
Mitigation measure Mixed Use Project (Commercial Oriented):1
has been changed from off to on.
Mitigation measure Floor Area Ratio 0.75 or Greater:1
has been changed from off to on.
Mitigation measure Provide Wide Sidewalks and Onsite Pedestrian Facilities:1
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
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Mitigation measure Project Provides Shade Trees to Shade Sidewalks:0.5
has been changed from off to on.
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Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
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Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
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Mitigation measure Provide Secure Bicycle Parking:1
has been changed from off to on.
Mitigation measure Provide Employee Lockers and Showers:1
has been changed from off to on.
Mitigation measure Shuttle Bus Service to Transit/Multi-Modal Center:2
has been changed from off to on.
Mitigation measure Preferential Carpool/Vanpool Parking:1.5
has been changed from off to on.
Mitigation measure Many Frequently Needed Services Provided:5

has been changed from off to on.

Mitigation measuremitop5: Park and Ride Lots
has been changed from on to off.

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	1,695.26	49.89	1,797.29	2.83	244.44
TOTALS (lbs/day, mitigated)	1,694.70	44.49	1,794.71	2.83	244.43

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	330.01	566.89	4,005.67	2.01	377.33
TOTALS (lbs/day, mitigated)	330.00	566.86	4,005.48	2.01	377.31

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	2,025.28	616.78	5,802.96	4.83	621.77
TOTALS (lbs/day, mitigated)	2,024.69	611.36	5,800.19	4.83	621.74

URBEMIS 2002 For Windows 7.5.0

ile Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 roject Name: River Village Operational Emissions
 roject Location: South Coast Air Basin (Los Angeles area)
 n-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Winter)

REA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	2.40	31.52	13.20	-	0.06
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	1,617.41	18.36	1,784.09	2.83	244.38
Landscaping - No winter emissions					
Consumer Prdcts	75.46	-	-	-	-
TOTALS (lbs/day, unmitigated)	1,695.26	49.89	1,797.29	2.83	244.44

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	52.80	88.27	633.57	0.32	59.43
Apartments low rise	28.40	47.36	339.97	0.17	31.89
Condo/townhouse general	28.77	48.03	344.78	0.18	32.34
Elementary school	9.34	15.91	110.82	0.06	10.66
City park	0.42	0.71	5.00	0.00	0.47
Commercial Center 10-30 ac	100.15	174.82	1,226.28	0.61	115.66
Commercial Center <10 ac.	47.56	83.07	582.67	0.29	54.96
Commercial Shops	2.59	4.52	31.69	0.02	2.99
Commercial Office	59.98	104.20	730.89	0.36	68.94
TOTAL EMISSIONS (lbs/day)	330.01	566.89	4,005.67	2.01	377.33

Does not include correction for passby trips.

Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Land Type	Trip Rate	Size	Total Trips
Single family housing	9.90 trips / dwelling units	591.00	5,850.90
Apartments low rise	6.90 trips / dwelling units	455.00	3,139.50
Condo/townhouse general	8.00 trips / dwelling units	398.00	3,184.00
Elementary school	1.45 trips / students	750.00	1,087.50
City park	2.60 trips / acres	20.90	54.34
Commercial Center 10-30 ac	54.06 trips / 1000 sq. ft.	252.00	13,623.12
Commercial Center <10 ac.	85.06 trips / 1000 sq. ft.	76.10	6,473.07
Commercial Shops	37.06 trips / 1000 sq. ft.	9.50	352.07
Commercial Office	11.56 trips / 1000 sq. ft.	702.40	8,119.74

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
City park				5.0	2.5	92.5
Commercial Center 10-30 ac.				2.0	1.0	97.0
Commercial Center <10 ac.				2.0	1.0	97.0
Commercial Shops				2.0	1.0	97.0
Commercial Office				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The area source mitigation measure option switch changed from off to on.
The natural gas residential percentage changed from 60 to 100.
The percentage of wood stoves changed from 35 to 0.
The landscape length of the summer period (in days) changed from 180 to 365.
The landscape year changed from 2004 to 2007.
The consumer product persons per residential unit changed from 2.861 to 3.056.
Mitigation measure Orient Buildings North/South: Rsdntl Space Heat.
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Mitigation measure All Electric Landscape Maintenance Equipment: Rsdntl Lndscp Maint.
has been changed from off to on.
Mitigation measure Central Water Heater: Cmrcl Space Heat.
has been changed from off to on.
Mitigation measure Orient Buildings North/South: Cmrcl Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Cmrcl Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Cmrcl Lndscp Maint.
has been changed from off to on.

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2007.
The double counting internal work trip limit changed from to 791.577.
The double counting shopping trip limit changed from to 395.7885.
The double counting other trip limit changed from to 5234.992.
The travel mode environment settings changed from both to: both
Mitigation measure Mixed Use Project (Residential Oriented):3
has been changed from off to on.
Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1
has been changed from off to on.
Mitigation measure Provide Direct Pedestrian Connections:1
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety:0.5
has been changed from off to on.
Mitigation measure Provide Street Furniture:0.5
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Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Signalization and Signage:0.5
has been changed from off to on.
Mitigation measure Mixed Use Project (Commercial Oriented):1
has been changed from off to on.
Mitigation measure Floor Area Ratio 0.75 or Greater:1
has been changed from off to on.
Mitigation measure Provide Wide Sidewalks and Onsite Pedestrian Facilities:1
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Project Provides Shade Trees to Shade Sidewalks:0.5
has been changed from off to on.
Mitigation measure Project Provides Street Art and/or Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety Designs/Infrastructure at Crossings:0.5
has been changed from off to on.
Mitigation measure Articulated Storefront(s) Display Windows with Visual Interest:0.25
has been changed from off to on.
Mitigation measure No Long Uninterrupted Walls Along Pedestrian Walkways:0.25
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Secure Bicycle Parking:1
has been changed from off to on.
Mitigation measure Provide Employee Lockers and Showers:1
has been changed from off to on.
Mitigation measure Shuttle Bus Service to Transit/Multi-Modal Center:2
has been changed from off to on.
Mitigation measure Preferential Carpool/Vanpool Parking:1.5
has been changed from off to on.
Mitigation measure Many Frequently Needed Services Provided:5

has been changed from off to on.
Litigation measuremitop5: Park and Ride Lots
has been changed from on to off.

Construction Health Risk Assessment for Landmark Village

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May 2006

SUMMARY

This assessment evaluates the health impacts due to diesel exhaust particulate matter (DPM) emitted by diesel trucks and equipment associated with construction of the Landmark Village project (proposed project). The proposed project site is bounded by State Route 126 (SR-126) on the northern boundary and by the Santa Clara River on the southern boundary. The proposed project will consist of 308 single-family residential units; 685 condominiums; 451 apartments; 337,600 square feet (sq. ft.) of retail area; 695,400 sq. ft. of office space; 70,000 sq. ft. of school buildings; and 16.1 acres of park area. Total development is anticipated to occur over a 251-week period. Also, a utility corridor extending approximately 39,800 feet in length and 35 feet wide was considered as a part of the proposed project. The utility corridor includes the infrastructure components for potable water, sewer, reclaimed water, and natural gas. The sources of DPM include on-road trucks and diesel-powered construction equipment like front-end loaders, bulldozers, and scrapers.

The South Coast Air Quality Management District (SCAQMD) recommends the following significance criteria for health risk assessments:

- Criterion 1: a greater than 10 in 1 million (10×10^{-6}) lifetime probability of contracting cancer; and
- Criterion 2: a health hazard index of 1.0 for evaluating the non-carcinogenic effects of toxic air contaminants.

Using SCAQMD's thresholds of significance, the health risk assessment finds that the maximum anticipated cancer risks associated with the construction of the proposed project are 1.2, 1.7, and 0.3 in 1 million at workplace, residential, and sensitive receptors, respectively. The assessment also finds that the chronic hazard indices for non-cancer health impacts are well below 1.0 at the maximally exposed receptors under this construction scenario. The health impacts associated with the construction of the proposed project are below the significance criteria and are, therefore, less than significant.

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1.0 GENERAL

On August 27, 1998, the California Air Resources Board (CARB) designated particulate emissions from diesel-fueled engines or DPM as a toxic air contaminant. The proposed construction of the proposed project will involve diesel trucks and diesel-powered mobile equipment. This health risk assessment evaluates the risk from DPM to determine if it is significant under CEQA.

The SCAQMD *California Environmental Quality Act (CEQA) Air Quality Handbook*¹ recommends a lifetime probability of contracting cancer greater than 10 in 1 million (10×10^{-6}) as a significance threshold for evaluating health impacts from toxic air contaminants. The *CEQA Air Quality Handbook* further identifies a health hazard index of 1.0 as an additional significance threshold for evaluating non-carcinogenic effects of toxic air contaminants.

1.1 Project Description

The proposed development at Landmark Village is within the South Coast Air Basin, which is under the jurisdiction of SCAQMD. The proposed project consists of 308 single-family residential units; 685 condominiums; 451 apartments; 337,600 sq. ft. of retail area; 695,400 sq. ft. of office space; 70,000 sq. ft. of school buildings; and 16.1 acres of park area. The construction of the utility corridor that provides the infrastructure components such as potable water, reclaimed water, sewer, and natural gas is also considered part of the proposed project. Total development is anticipated to occur over a 251-week period. The construction schedule is mainly divided into three phases: grading, asphalt paving, and building construction. Grading and asphalt paving are anticipated to occur during the first 75 weeks, and the building construction phase is anticipated to occur from week 76 to week 251. The construction of the utility corridor will occur over 52-week period starting in week one along with grading and asphalt paving. The construction of the utility corridor is also divided in three different phases: grading, grading and water tanks construction, and grading and water tanks welding and coating. These three phases are anticipated to occur over the first 30 weeks, week 31 to week 48, and week 49 to week 52, respectively. Currently, the project site is either used for agricultural crop production or is vacant, and no demolition is required. The project site is bounded by SR-126 on the northern boundary and by the Santa Clara River on the southern boundary. Two soil borrow areas are proposed in the vicinity of the northern and southern boundary of the project site.

¹ CEQA Air Quality Handbook, South Coast Air Quality Management District, April 1993.

2.0 SOURCE DESCRIPTION

Figure 1, Conceptual Site Plan, shows the site plan for the proposed project. For this analysis, the whole site is modeled as an area source consisting of DPM emissions from truck and construction equipment.

The on- and off-road vehicles and equipment that emit DPM and are associated with construction of the proposed project include:

- Diesel-fueled construction equipment (e.g., scrapers, tractors, backhoes, rollers);
- Heavy-duty diesel trucks (e.g., haul trucks and on-site water trucks)

These sources will travel through the proposed development area depending on the construction phases which include grading, building construction, application of architectural coatings, and asphalt paving. For modeling purposes, the whole site is divided into five parts. Every part is considered as a separate area source, and it is assumed that the diesel trucks and construction equipment will operate throughout the whole area. Similarly, the utility corridor is divided into 10 different parts to facilitate modeling. Also, every part of the utility corridor is considered as a separate area source, and it is assumed that the diesel trucks and construction equipment will operate throughout the utility corridor. **Table 1**, below, provides information about the area sources.

Table 1
Source Description

Area Source ID	No. of Vertices	Area in sq. m.
I	20	218,351.3
II	13	222,649.6
III	20	204,169.9
IV	13	286,594.2
V	18	286,522.8
UCHRA1	12	278,253.3
UCHRA2	20	289,227.3
UCHRA3	10	455,337.6
UCHRA4	11	95,374.2
UCHRA5	4	173,353.3
UCHRA6	4	311,792.2
UCHRA7	4	216,796.2
UCHRA8	8	89,050.6
UCHRA9	9	82,513.9
UCHRA10	10	74,962.8

Source: Impact Sciences, Inc., 2006.

In the site-grading phase, the trucks will haul earth material from the borrow site and will dump their loads on site. The typical on-site round-trip travel distance was estimated to be 4 miles. The typical workday was estimated to be 10 hours (i.e., from 8 AM to 6 PM).

3.0 CALCULATION OF EMISSIONS

Unmitigated construction emissions were estimated based on the information provided in the *Software Users' Guide: URBEMIS2002 for Windows with Enhanced Construction Module* (April 2005)² (Guide) (the assumptions are available for review in **Appendix 4.9** of the EIR). URBEMIS2002 is a land-use and transportation-based air quality model developed in cooperation with the CARB and designed to estimate air emissions from new development projects, including construction emissions. The model is designed to calculate emissions for specific air basins; for this project, the model was run using model inputs designed specifically for the South Coast Air Basin.

The information regarding different construction activities (site clearing, grading, asphalt paving, and application of architectural coatings) was provided by the project applicant. Also, the applicant provided details about the types and numbers of construction equipment that would be on the site during grading operations, the acreages graded, the amount of material that would be graded, and the timing and duration of the grading and construction operations. Additional details regarding these calculations are provided in **Section 4.9, Air Quality**, in the Landmark Village Draft Environmental Impact Report (DEIR). The number of working days in a particular phase was calculated assuming 5 working days each week, with a 10-hour working day (i.e., 8 AM to 6 PM). DPM emissions for each phase were calculated by multiplying total working days by the worst-case daily emissions. Finally, DPM emissions from all the phases were added to get total DPM emissions over the entire construction period. For the purpose of this assessment, the overall emissions during the six-year construction period were averaged to generate one annual average emission rate to be used as an input for the dispersion modeling. A similar approach is used to calculate the emissions from the construction of the utility corridor. DPM emissions from all the phases associated with the utility corridor construction were added to get the annual DPM emissions.

The estimated emissions for each phase and for the overall project are shown in **Table 2, Estimated Diesel Particulate Matter Emissions from Construction**. As shown in **Table 2**, the emissions vary from year to year depending on the area of development and the phase of the construction activity.

² Jones and Stokes. *Software Users' Guide: URBEMIS2002 for Windows with Enhanced Construction Module* (Sacramento, California: Jones and Stokes, April 2005).

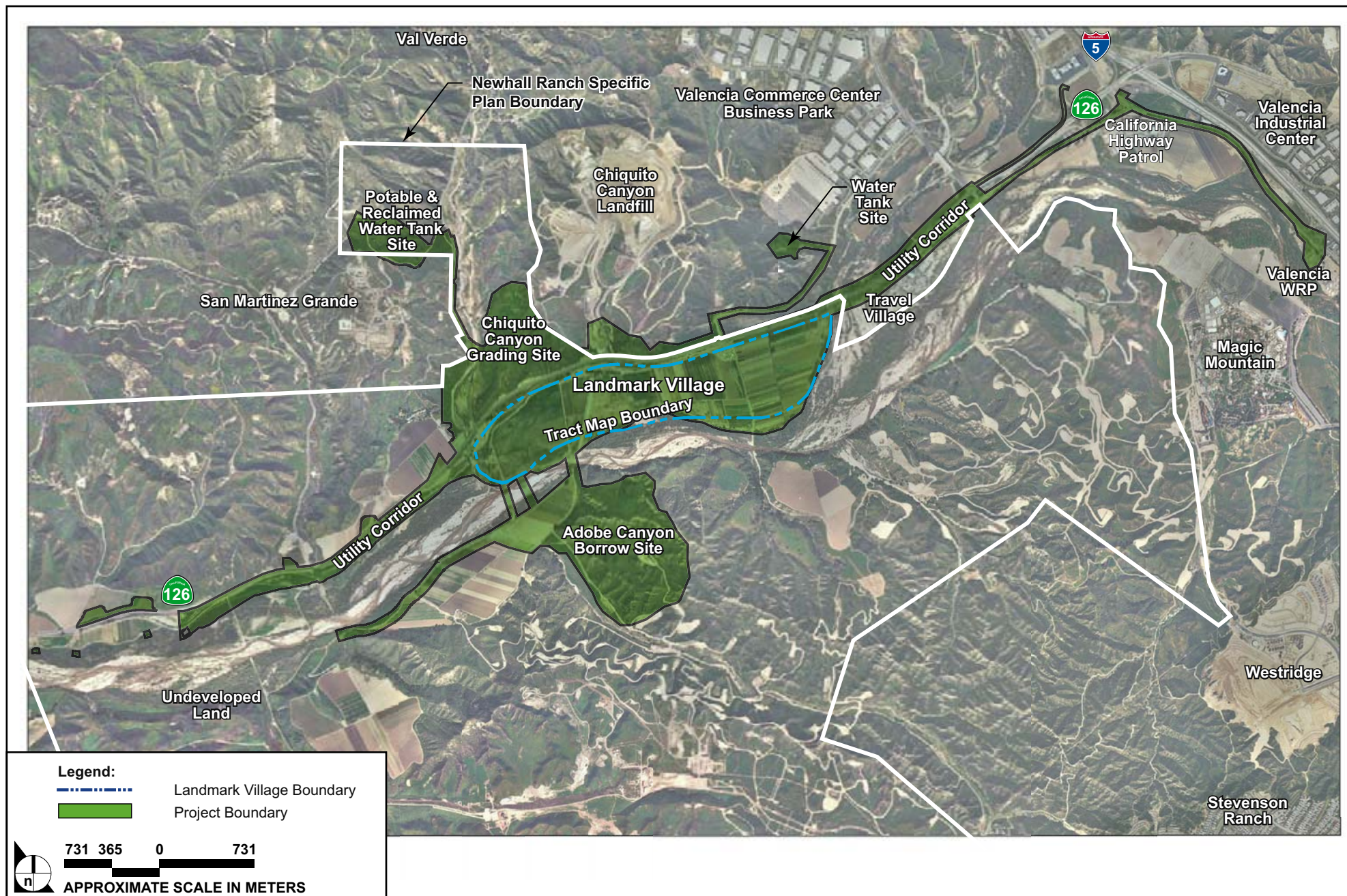


FIGURE 1

Conceptual Site Plan

Table 2
Estimated Diesel Particulate Matter Emissions
from Construction Operations

				Emissions	
Phase	Source	Schedule (weeks)	Duration (weeks)	On Worst-Day (lbs/day)	Per Phase (lbs)
A	On-Road Diesel Exhaust	1 to 44	44	2.13	468.60
	Off-Road Diesel Exhaust			36.17	7,957.40
B	On-Road Diesel Exhaust	45 to 48	4	2.13	53.25
	Off-Road Diesel Exhaust			36.25	906.25
C	On-Road Diesel Exhaust	49 to 58	10	0	0
	Off-Road Diesel Exhaust			6.36	318.00
D	On-Road Diesel Exhaust	59 to 62	4	0.28	5.60
	Off-Road Diesel Exhaust			10.90	218.00
E	On-Road Diesel Exhaust	63 to 75	13	0.28	18.20
	Off-Road Diesel Exhaust			4.67	303.55
F	On-Road Diesel Exhaust	76 to 127	52	0	0
	Off-Road Diesel Exhaust			89.66	23,311.60
G	On-Road Diesel Exhaust	128	1	0	0
	Off-Road Diesel Exhaust			94.45	472.25
H	On-Road Diesel Exhaust	129 to 179	51	0	0
	Off-Road Diesel Exhaust			74.15	18,908.25
I	On-Road Diesel Exhaust	180 to 214	45	0	0
	Off-Road Diesel Exhaust			65.77	14,798.25
J	On-Road Diesel Exhaust	215 to 232	18	0	0
	Off-Road Diesel Exhaust			61.01	5,490.90
K	On-Road Diesel Exhaust	233 to 238	6	0	0
	Off-Road Diesel Exhaust			40.14	1,204.20
L	On-Road Diesel Exhaust	239 to 240	2	0	0
	Off-Road Diesel Exhaust			31.89	318.90
M	On-Road Diesel Exhaust	241 to 251	11	0	0
	Off-Road Diesel Exhaust			23.64	1,300.20
Total					76,053.40
UC1	On-Road Diesel Exhaust	1 to 30	30	0.02	0.60
	Off-Road Diesel Exhaust			2.18	65.40
UC2	On-Road Diesel Exhaust	31 to 48	18	0.02	0.36
	Off-Road Diesel Exhaust			2.80	50.40
UC3	On-Road Diesel Exhaust	49 to 52	4	0.02	0.08
	Off-Road Diesel Exhaust			5.94	23.76
Total					140.60

Source: Impact Sciences, Inc., 2006.

4.0 MODELING METHODOLOGY

4.1 Modeling Approach

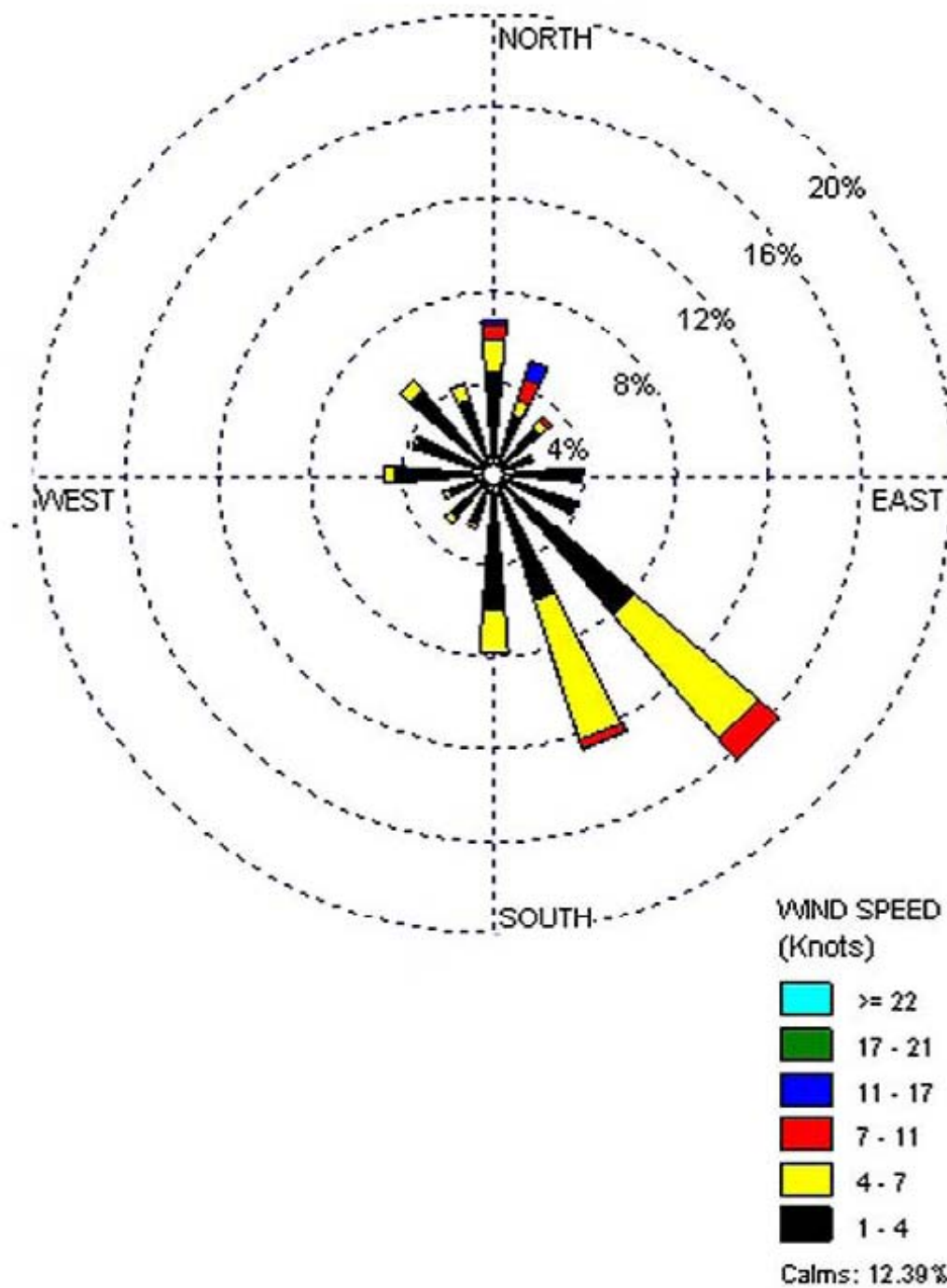
The U.S. Environmental Protection Agency (U.S. EPA) approved Industrial Source Complex model, ISCST3³, was used to model the air quality impacts of DPM emissions during construction of the proposed project and construction of the utility corridor. This model can estimate the air quality impacts of single or multiple sources using actual meteorological conditions.

The model was configured with the following control parameters:

- Modeling switches: regulatory default (except calms processing was turned off per SCAQMD guidelines);
- Averaging period: annual; and
- Choice of dispersion coefficients based upon land-use type: urban (per SCAQMD health risk assessment guidelines).

The 1981 meteorological data used in the modeling analysis was obtained from the SCAQMD website for the Newhall monitoring station. The Newhall meteorological monitoring site is about 7.5 kilometers east-southeast of the project site and is the closest meteorological monitoring station to the proposed project site. A wind rose illustrating prevailing wind speeds and directions is shown in **Figure 2, Wind Rose for the Newhall Monitoring Station**.

Sources of emissions from trucks and construction equipment were modeled as five area sources over the proposed project site. (These five areas were selected for purposes of the Localized Significance Thresholds Analysis, which was also performed for this project, but they are not intended to represent phasing of the construction over the project site.) The annual emission rate over the six-year construction period was converted to grams per second (g/sec) by dividing the annual emission rate by the annual operating hours and 3,600 seconds per hour, and by multiplying the result by 453.6 grams per pound. The overall emissions were distributed over the five area sources proportional to their areas. The corresponding emission rate for each area source in g/sec was divided by the area of each of the area sources as measured in square meters to calculate the emission rate in grams per second per square meter (g/sec-m²). Thus, the emissions from the trucks and construction equipment were assumed to be distributed equally throughout these areas, as is the convention for area source emissions. Similarly, the sources of emissions associated with construction of the utility corridor were modeled as 10 area sources distributed over the utility corridor site. (These area sources were selected to facilitate the model



SOURCE: Impact Sciences, Inc. – May 2006

FIGURE 2

Wind Rose for the Newhall Monitoring Station



simulation and are not intended to represent the phasing of the construction over the project site.) Also, the overall emissions associated with construction of the utility corridor were distributed over the utility corridor site, and the emission rate was calculated in g/sec-m² using the same method described earlier.

The emissions from the trucks and equipment were given an initial height of 4.15 meters to account for the height of the exhaust stack and initial plume rise of the heated exhaust. This value is used by the CARB to characterize the health impacts of a variety of scenarios involving diesel vehicles.

4.2 Receptors Used for Evaluating Modeled Impacts

The nearest residential community to the project site is the community of Val Verde located approximately 1.6 kilometers (1 mile) to the north, across SR-126. Other residences are scattered throughout the area, primarily to the north of the site across SR-126. A recreational vehicle park is located to the east of the project site; however, occupants are limited to a 30-day stay. The nearest potential off-site workplace receptors are located to the northeast in the Valencia Commerce Center.

The SCAQMD *CEQA Air Quality Handbook* recommends that sensitive receptors be evaluated in an air quality impact analysis. Sensitive receptors are generally considered to be facilities where children, the elderly, or ill people may reside. The *CEQA Air Quality Handbook* lists the following land uses that should be considered as sensitive receptors:

- Long-term health care facilities
- Rehabilitation centers
- Convalescent centers
- Retirement homes
- Residences
- Schools
- Playgrounds
- Child care centers
- Athletic facilities

For the purpose of this assessment, potential sensitive receptors included schools, childcare centers, and hospitals.

One elementary school is located within 2 kilometers (1.25 miles) of the project site. Its name, location, and distance from the project site are shown in **Table 3, Sensitive Receptors within Two Kilometers of**

the Landmark Village Project Site and its location is depicted in Figure 3, Sensitive Receptors Near the Project Site. No childcare centers or hospitals were identified within 2 kilometers of the project site. The school was treated as a discrete receptor in this analysis, and it was located within the modeled area within a Cartesian grid that was spaced at 100-meter intervals up to 2,000 meters (2.0 kilometers) from the project site boundary. The overall receptor grid was designed to cover areas of existing and future off-site residential exposure, areas of commercial/industrial development, to allow assessment of potential workplace exposure, and potential exposure to other sensitive receptors listed in the SCAQMD CEQA Air Quality Handbook.

Table 3
Sensitive Receptors within Two Kilometers
of Landmark Village Project Site

Name of Receptor	Distance from Landmark Village (km)	Direction
Live Oak Elementary School	1.68	North

Source: Impact Sciences, 2006.

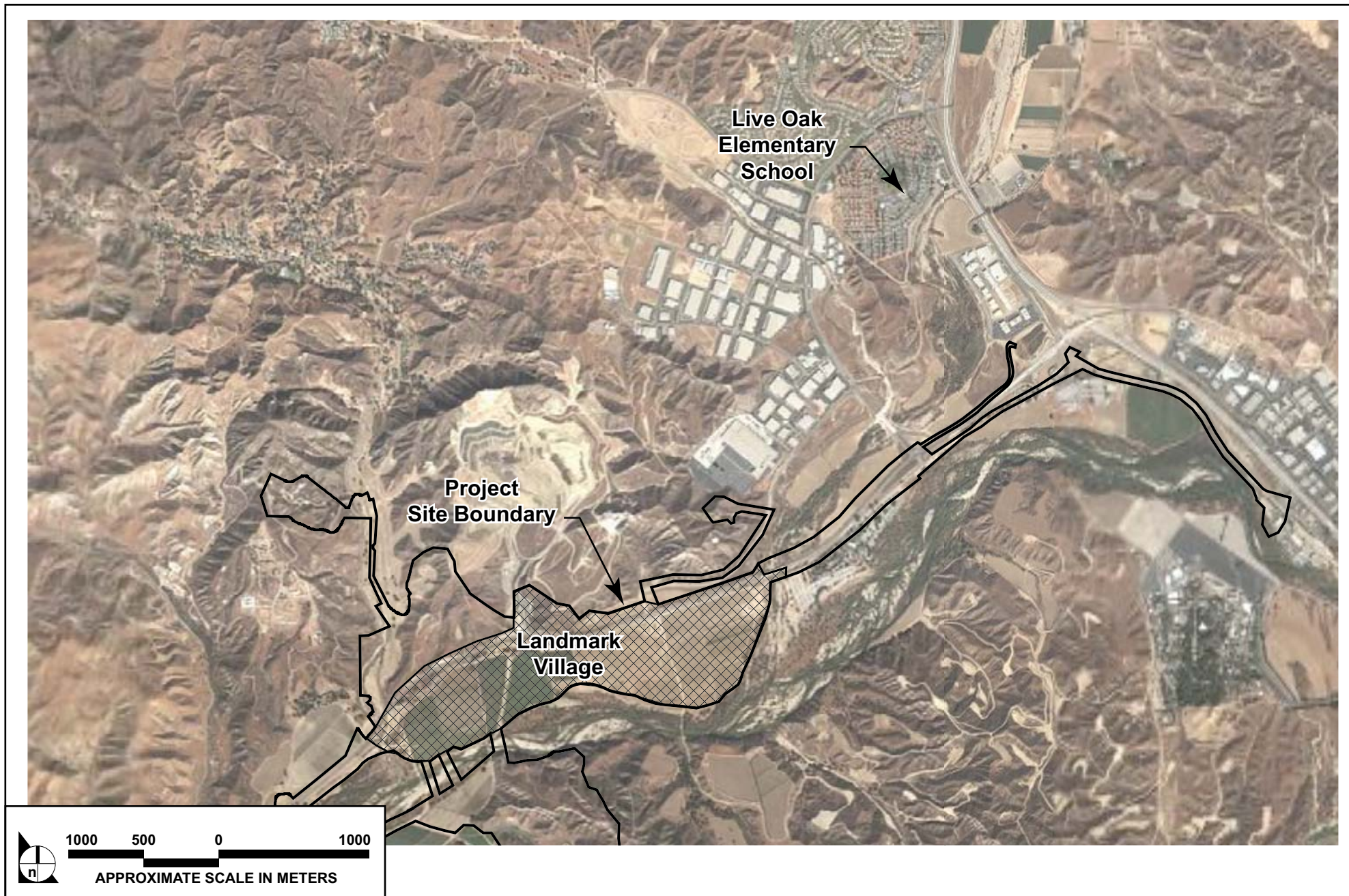
5.0 ESTIMATION OF EXPOSURE THROUGH INHALATION

This assessment considers exposure via inhalation only. The potential exposure through other pathways (e.g., ingestion) requires substance and site-specific data, and the specific parameters for DPM are not known for these pathways.⁴ This assessment also assumes that a person is exposed continuously for 70 years. This approach is intended to result in conservative (i.e., health protective) estimates of health impacts. The SCAQMD follows the recommendation in the Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*⁵ (OEHHA Guidance) with respect to the evaluation of cancer risk calculations for short-term exposures (i.e., less than a maximum theoretical project life of 70 years). The OEHHA Guidance states:

"[A]s the exposure duration decreases the uncertainties introduced by applying cancer potency factors derived from very long term studies increases. Short-term high exposures are not necessarily equivalent to longer-term lower exposures even when the total dose is the same. OEHHA therefore does not support the use of current cancer potency factor to evaluate cancer risk for exposures of less than 9 years. If such risk must be evaluated, we recommend assuming that average daily dose for short-term exposure is assumed to last for a minimum of 9 years."

⁴ "Report to the Air Resources Board on the Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Part A Exposure Assessment," Approved by the Scientific Review Panel, April 1998.

⁵ "Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments," California Environmental Protection Agency Office of Environmental Health Hazard Assessment, August 2003.



SOURCE: Impact Sciences, Inc. – May 2006

FIGURE 3

Sensitive Receptors Near the Project Site

Exposure through inhalation is a function of the respiration rate and the concentration of a substance in the air and is calculated by using the following formulas:⁶

$$\text{Risk} = \text{Dose-inhalation} * \text{Inhalation cancer potency factor (Equation 1)}$$

where:

$$\text{Inhalation cancer potency factor (CPF)} = 1.1 \text{ (milligram per kilogram per day)}^{-1} \text{ (for DPM)}$$

$$\text{Dose Inhalation} = C_{\text{air}} * \text{DBR} * A * \text{EF} * \text{ED} * 10^{-6} / \text{AT (Equation 2)}$$

where:

C_{air} = concentration in microgram per cubic meter

DBR = breathing rate in liter per kilogram of body weight per day

A = inhalation absorption factor (1 for DPM)

EF = exposure frequency in days per year

ED = exposure duration in years

AT = averaging time period over which exposure is averaged in days (25,550 days for 70 years)

For modeling purpose, the default values suggested by the manual were used for the dose inhalation calculation except for daily breathing rate. The default values used in the model are as follows:

EF = 350 days/year

ED = 9 years

AT = 25,550 days

A = 1

In accordance with CARB policy⁷, a breathing rate equal to the 80th percentile should be used in single-point risk management decisions, such as those subject to a threshold or standard, for which the cancer risk is entirely associated with inhalation and residential cancer risk is being evaluated. These two criteria are met for this assessment. Thus, a breathing rate of 302 liter per kilogram of body weight per day was used for the residential cancer risk calculations.

The risk is calculated by multiplying the dose by the inhalation potency factor. The inhalation potency factor for DPM is 1.1.⁸ In order to directly calculate risk as a modeling output, a multiplying factor was derived based on the information discussed above. This multiplying factor, when multiplied by the

⁶ Ibid.

⁷ California Air Resources Board and Office of Environmental Health Hazard Assessment, *Recommended Interim Risk Management Policy for Inhalation-Based Residential Cancer Risk*, October 9, 2003.

⁸ "Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments," California Environmental Protection Agency Office of Environmental Health Hazard Assessment, pp. 7-4, August 2003.

concentration that the dispersion model calculates, results in risk in 1 million at a particular receptor. The multiplying factor was calculated as follows:

$$\begin{aligned}\text{Multiplying factor} &= \text{CPF} * (\text{DBR} * \text{A} * \text{EF} * \text{ED} * 10^{-6} / \text{AT}) * 10^6 \\ &= 1.1 * (302 \text{ L/kg body weight-day} * 1 * 350 \text{ day/yr} * 9 \text{ yr} * 10^{-6} / 25,550 \text{ days}) * 10^6 = 40.96 (\mu\text{g}/\text{m}^3)^{-1}\end{aligned}$$

Table 4, Summary of Maximum Modeled Cancer Risks of Diesel Particulate Matter from Construction, provides the model output. **Figure 4, Modeled Impacts of Diesel Particulate Matter**, illustrates the potential risks due to DPM from the construction of the proposed development. **Figure 4** shows the isopleths (lines of constant modeled excess cancer risk) that represent estimated cancer risks of 5 and 10 in 1 million for residential and sensitive receptors. These isopleths reflect the cancer risk at residential receptors; no adjustment has been made to the isopleths for workplace exposures, which would be lower.

Table 4
Summary of Maximum Modeled
Cancer Risks of Diesel Particulate Matter
from Construction

Receptor	Cancer Risk
Residence ¹	1.7 x 10 ⁻⁶
Sensitive ²	0.3 x 10 ⁻⁶
Workplace ³	1.2 x 10 ⁻⁶

Source: Impact Sciences, Inc., 2006.

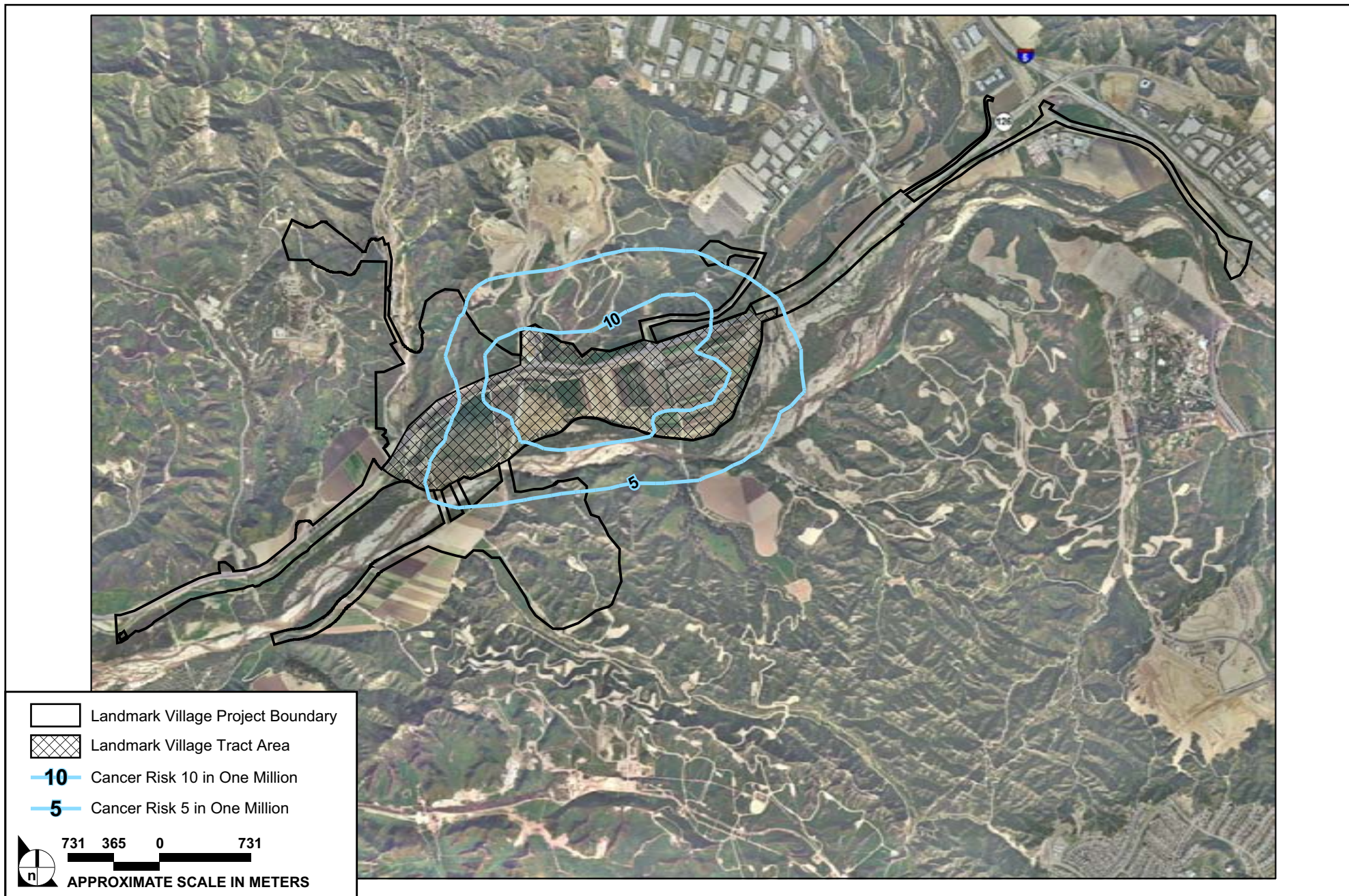
¹ Maximum impact occurred at Val Verde;

² Maximum impact occurred at Live Oak Elementary School;

³ Maximum impact occurred at Commerce Center Commercial.

In addition to the potential cancer risk, DPM has chronic (i.e., long-term) noncancer health impacts. The chronic noncancer inhalation hazard indices for the proposed project were calculated by dividing the modeled annual average concentrations of the DPM by the Reference Exposure Level (REL). The OEHHA has recommended an ambient concentration of 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) as the chronic inhalation REL for DPM. The REL is the concentration at or below which no adverse health effects are anticipated. No inhalation REL for acute (i.e., short-term) effects has been determined by the OEHHA.

While calculating cancer risks associated with DPM from construction, the multiplying factor was used to generate the results directly in terms of cancer risk in 1 million. Therefore, the model did not calculate



SOURCE: Impact Sciences, Inc. – May 2006

FIGURE 4

Model Impacts of Diesel Particulate Matter

the concentrations separately. However, the concentrations are required to calculate the chronic non-cancer inhalation hazard indices. Therefore, the concentrations were calculated by dividing the risk values by the multiplying factor. These concentrations were then further divided by RELs to calculate chronic non-cancer inhalation hazard indices.

The maximum chronic hazard indices at selected receptors are shown in **Table 5, Summary of Maximum Modeled Noncancer Health Impacts of Diesel Exhaust Particulate Matter from Construction**. The net chronic hazard indices at the points of maximum impact are much less than the SCAQMD significance threshold of 1.0 for noncancer health impacts. The areas of maximum non-cancer impact occurred in the same locations as those described above for the cancer risks.

Table 5
Summary of Maximum Modeled Noncancer Health Impacts
of Diesel Particulate Matter from Construction

Receptor	Chronic Hazard Index
Residential ¹	0.0008
Sensitive ²	0.0001
Workplace ³	0.0006

Source: Impact Sciences, Inc., 2006.

¹ *Maximum impact occurred at Val Verde;*

² *Maximum impact occurred at Live Oak Elementary School;*

³ *Maximum impact occurred at Commerce Center Commercial.*

6.0 CONCLUSIONS

Based on this analysis, construction of the proposed project would not exceed the SCAQMD significance threshold of a cancer risk of 10 in 1 million since the maximum net anticipated cancer risks are 1.2, 1.7, and 0.3 in 1 million at workplace, residential, and sensitive receptors, respectively. The chronic hazard indices for non-cancer health impacts are also well below the significance threshold of 1.0 at the maximally exposed receptors. It should be noted that these health impacts do not reflect the reductions in diesel emissions from trucks and mobile equipment that will occur during the construction period as a result of increasingly stringent emission standards, many of which will take effect in the next few years. Furthermore, the activity levels (e.g., types and numbers of construction equipment) used in this assessment represent the highest *daily* levels anticipated during each phase of the construction of the project; the actual levels are likely to be lower. Accordingly, the actual health impacts due to construction of the proposed project would be less than those presented in this assessment.

APPENDIX A

Landmark Village Construction Emissions

Estimated Unmitigated Utility Corridor Construction Emissions

Subphase/Emissions Source	Emissions (lbs/day)				
	CO	VOC	NO _x	SO _x	PM ₁₀
Weeks 1 thru 30					
Unmitigated Emissions Total	85.90	11.38	62.83	0	296.80
SCAQMD Thresholds	550	75	100	150	150
Exceeds Thresholds?	NO	NO	NO	NO	YES
Notes: Grading of utility corridor					
Weeks 31 thru 48					
Unmitigated Emissions Total	110.80	14.30	80.34	0	297.42
SCAQMD Thresholds	550	75	100	150	150
Exceeds Thresholds?	NO	NO	NO	NO	YES
Notes: Grading of utility corridor and construction of water tanks					
Weeks 49 thru 52					
Unmitigated Emissions Total	184.25	58.96	152.37	0	300.57
SCAQMD Thresholds	550	75	100	150	150
Exceeds Thresholds?	NO	NO	YES	NO	YES
Notes: Grading of utility corridor and welding and coating of water tanks					

Source: Impact Sciences, Inc.

NEWHALL RANCH SPECIFIC PLAN FINAL EIR AIR QUALITY MITIGATION MEASURES

The following air quality mitigation measures are from the Newhall Ranch Specific Plan Final EIR. These measures, as appropriate, are intended to apply to all future development within Newhall Ranch. Not all of the following measure are appropriate for River Village and comments on the appropriateness of each measure to the River Village project is noted in *italics*.

- 4.10-1. The Specific Plan will provide Commercial and Service uses in close proximity to residential subdivisions.
- 4.10-2. The Specific Plan will locate residential uses in close proximity to Commercial uses, Mixed-Uses, and Business Parks.
- 4.10-3. Bus pull-ins will be constructed throughout the Specific Plan site.
- 4.10-4. Pedestrian facilities, such as sidewalks, and community regional, and local trails, will be provided throughout the Specific Plan site.
- 4.10-5. Roads with adjacent trails for pedestrian and bicycle use will be provided throughout the Specific Plan site connecting the individual Villages and community.
- 4.10-6. The applicant of future subdivisions shall implement all rules and regulations adopted by the Governing Board of the SCAQMD which are applicable to the development of the subdivision (such as Rule 402 - Nuisance, Rule 403 - Fugitive Dust, Rule 1113 - Architectural Coatings) and which are in effect at the time of development. The purpose of Rule 403 is to reduce the amount of particulate matter entrained in the ambient air as a result of man-made fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or man-made condition capable of generating fugitive dust such as the mass and remedial grading associated with the project as well as weed abatement and stockpiling of construction materials (*i.e.*, rock, earth, gravel). Rule 403 requires that grading operations either (1) take actions specified in Tables 1 and 2 of the Rule for each applicable source of fugitive dust and take certain notification and record keeping actions; or (2) obtain an approved Fugitive Dust Control Plan. A complete copy of the SCAQMD's Rule 403 Implementation Handbook, which has been included in Appendix 4.10, provides guideline tables to demonstrate the typical mitigation program and record keeping required for grading operations (Tables 1 and 2 and sample record keeping chart). The record keeping is accomplished by on-site construction personnel, typically the construction superintendent.

Each future subdivision proposed in association with the Newhall Ranch Specific Plan shall implement the following if found applicable and feasible for that subdivision.

GRADING

- a. Apply non-toxic soil stabilizers according to manufacturers' specification to all inactive construction areas (previously graded areas inactive for ten days or more).
- b. Replace groundcover in disturbed areas as quickly as possible.
- c. Enclose, cover, water twice daily, or apply non-toxic soil binders according to manufacturers' specifications, to exposed piles (*i.e.*, gravel, sand, dirt) with 5 percent or greater silt content.
- d. Water active sites at least twice daily.
- e. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.
- f. Monitor for particulate emissions according to District-specified procedures.
- g. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (*i.e.*, minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of CVC Section 23114.

The effectiveness of these measures at reducing PM10 emissions ranges from 7 to 74 percent.¹

¹ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-15 and p. A11-77.

PAVED ROADS

- h. Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water).
- i. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.

The effectiveness of these measures at reducing PM10 emissions ranges from 25 to 70 percent.²

UNPAVED ROADS

- j. Apply water three times daily, or non-toxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas or unpaved road surfaces.
- k. Reduce traffic speeds on all unpaved roads to 15 mph or less.
- l. Pave construction roads that have a traffic volume of more than 50 daily trips by construction equipment, 150 total daily trips for all vehicles.
- m. Pave all construction access roads at least 100 feet on to the site from the main road.
- n. Pave construction roads that have a daily traffic volume of less than 50 vehicular trips.

The effectiveness of these measures at reducing PM10 emissions ranges from 40 to 92.5 percent.³

4.10-7. Prior to the approval of each future subdivision proposed in association with the Newhall Ranch Specific Plan, each of the construction emission reduction measures indicated below (and in Tables 11-2 and 11-3 of the SCAQMD's CEQA *Air Quality Handbook*, as amended) shall be implemented if found applicable and feasible for that subdivision.

ON-ROAD MOBILE SOURCE CONSTRUCTION EMISSIONS:

- a. Configure construction parking to minimize traffic interference. *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.⁴*
- b. Provide temporary traffic controls when construction activities have the potential to disrupt traffic to maintain traffic flow (e.g., signage, flag person, detours). *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.⁵*
- c. Schedule construction activities that affect traffic flow to off-peak hours (e.g., between 7:00 P.M. and 6:00 A.M. and between 10:00 A.M. and 3:00 P.M.). *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.⁶*
- d. Develop a trip reduction plan to achieve a 1.5 average vehicle ridership (AVR) for construction employees. *Mitigation not suitable for River Village because SCAQMD Rule 2202 applies to all employers who meet certain criteria for implementing trip reduction measures. The requirement to achieve a specific AVR has been ruled unlawful by the federal government and is no longer recommended.*
- e. Implement a shuttle service to and from retail services and food establishments during lunch hours. *Mitigation not suitable for River Village because construction workers typically take a half-hour lunch at various times of the day and eat on-site food that was either brought by the workers (brown bag) or purchased from mobile caterers who travel to the site.*
- f. Develop a construction traffic management plan that includes the following measures to address construction traffic that has the potential to affect traffic on public streets:
 - Rerouting construction traffic off congested streets *Mitigation not suitable for River Village because the only access to the site is via SR-126 and there are no other roadways on which to reroute traffic.;*
 - Consolidating truck deliveries; and
 - Providing temporary dedicated turn lanes for movement of construction trucks and equipment on and off of the site. *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.⁷*

² South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-15 and pp. A11-77 to -78.

³ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-16 and p. A11-78.

⁴ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

⁵ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

⁶ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

- g. Prohibit truck idling in excess of two minutes. *Mitigation not suitable for River Village because the nature of diesel motors does not lend them to constant turning on and off. Premature wear, and increased air emissions from turning the engines on and off, are common results. It is also extremely difficult to effectively monitor the implementation of this measure on an approximately 700-acre site with contractors who would be concerned about maintaining their equipment. Furthermore, the effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.*⁸

OFF-ROAD MOBILE SOURCE CONSTRUCTION EMISSIONS:

- h. Use methanol-fueled pile drivers. *Any equipment that utilizes an alternative fuel that reduces VOC, NOx, and/or PM10 emissions is advisable. This measure is replaced in the impact analysis with another measure that considers other alternative fuels for diesel-fueled construction equipment.*
- i. Suspend use of all construction equipment operations during second stage smog alerts. *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.*⁹
- j. Prevent trucks from idling longer than two minutes. *Mitigation not suitable for River Village because the nature of diesel motors does not lend them to constant turning on and off. Premature wear, and increased air emissions from turning the engines on and off, are common results. It is also extremely difficult to effectively monitor the implementation of this measure on an approximately 700-acre site with contractors who would be concerned about maintaining their equipment. Furthermore, the effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.*¹⁰
- k. Use electricity from power poles rather than temporary diesel-powered generators.
- l. Use electricity from power poles rather than temporary gasoline-powered generators.
- m. Use methanol- or natural gas-powered mobile equipment instead of diesel. *Any equipment that utilizes an alternative fuel that reduces VOC, NOx, and/or PM10 emissions is advisable.*
- n. Use propane- or butane-powered on-site mobile equipment instead of gasoline. *Any equipment that utilizes an alternative fuel that reduces VOC, NOx, and/or PM10 emissions is advisable.*

OPERATION IMPACTS

- 4.10-8. The applicant of future subdivisions shall implement all rules and regulations adopted by the Governing Board of the SCAQMD which are applicable to the development of the subdivision (such as Rule 402 - Nuisance, Rule 1102 - Petroleum Solvent Dry Cleaners, Rule 1111 - NOx Emissions from Natural Gas-Fired, Fan-Type Central Furnaces, Rule 1146 - Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters) and which are in effect at the time of occupancy permit issuance.
- 4.10-9. Prior to the approval of each future subdivision proposed in association with the Newhall Ranch Specific Plan, each of the operational emission reduction measures indicated below (and in Tables 11-6 and 11-7 of the SCAQMD's CEQA *Air Quality Handbook*, as amended) shall be implemented if found applicable and feasible for that subdivision.

ON-ROAD MOBILE SOURCE OPERATIONAL EMISSIONS:

RESIDENTIAL USES

- a. Include satellite telecommunications centers in residential subdivisions. *Mitigation not suitable for River Village because satellite telecommunications centers have been superseded by other technology.*
- b. Establish a shuttle service from residential subdivisions to commercial core areas. *Mitigation not suitable for River Village because residential uses are in close proximity and within walking distance to commercial uses proposed within River Village.*
- c. Construct on-site or off-site bus stops (e.g., bus turnouts, passenger benches, and shelters).

⁷ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

⁸ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

⁹ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-14.

¹⁰ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-14.

- d. Construct off-site pedestrian facility improvements, such as overpasses and wider sidewalks. *Mitigation not suitable for River Village because no uses adjacent to the River Village site exist within Newhall Ranch to which pedestrian access would be warranted.*
- e. Include retail services within or adjacent to residential subdivisions. *The proposed project is in conformance with this measure.*
- f. Provide shuttles to major rail transit centers or multi-modal stations.
- g. Contribute to regional transit systems (e.g., right-of-way, capital improvements, etc.). *This measure does not directly contribute to reduced air emissions, emission reductions have not been quantified by SCAQMD,¹¹ and it is not given emissions reduction credit in the impact analysis.*
- h. Synchronize traffic lights on streets impacted by development.
- i. Construct, contribute, or dedicate land for the provision of off-site bicycle trails linking the facility to designated bicycle commuting routes.

COMMERCIAL USES

- j. Provide preferential parking spaces for carpools and vanpools and provide 7'2" minimum vertical clearance in parking facilities for vanpool access.
- k. Implement on-site circulation plans in parking lots to reduce vehicle queuing. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.¹²*
- l. Improve traffic flow at drive-thru's by designing separate windows for different functions and by providing temporary parking for orders not immediately available for pickup. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.¹³*
- m. Provide video-conference facilities. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.¹⁴*
- n. Set up resident worker training programs to improve job/housing balance. *Mitigation not suitable for River Village because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site. Furthermore, the effectiveness of this measure to reduce air emissions in the basin lies in actually achieving jobs/housing balance. The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.¹⁵*
- o. Implement home dispatching system where employees receive routing schedule by phone instead of driving to work. *Mitigation not suitable for River Village because it is outside the purview of the project applicant/developer to set up such a system. Such systems are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.*
- p. Develop a program to minimize the use of fleet vehicles during smog alerts (for business not subject to Regulation XV (now Rule 2202) or XII). *Mitigation not suitable for River Village because no commercial retail or office use on the site is expected to use fleet vehicles.*
- q. Use low-emissions fleet vehicles:
 - TLEV
 - ULEV
 - LEV
 - ZEV*Mitigation not suitable for River Village because no commercial retail or office use on the site is expected to use fleet vehicles.*
- r. Reduce employee parking spaces for those businesses subject to Regulation XV (now Rule 2202). *Rule 2202 applies to any employer who employs 250 or more employees on a full or part-time basis at a work site for a consecutive six-month period. It is conceivable that an office use employing as*

¹¹ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-18.

¹² South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

¹³ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-19.

¹⁴ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-19.

¹⁵ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-19.

many as 250 people can locate on the site; therefore, this mitigation measure applies to the River Village project. The requirement to achieve a specific AVR has been ruled unlawful by the federal government and is no longer recommended.¹⁶

- s. Implement a lunch shuttle service from a work site(s) to food establishments. Mitigation not suitable for River Village because Lots within River Village designated for mixed use commercial are expected to have food establishments located within walking distance, thereby not necessitating lunch shuttle service.
- t. Implement compressed work-week schedules where weekly work hours are compressed into fewer than five days.
 - 9/80
 - 4/40
 - 3/36

Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.

- u. Develop a trip reduction plan to achieve 1.5 AVR for businesses with less than 100 employees or multi-tenant work sites. Mitigation not suitable for River Village because SCAQMD Rule 2202 applies to all employers who meet certain criteria for implementing trip reduction measures. The requirement to achieve a specific AVR has been ruled unlawful by the federal government and is no longer recommended.
- v. Utilize satellite offices rather than regular work site to reduce VMT. Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.
- w. Establish a home-based telecommuting program. Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.
- x. Provide on-site child care and after-school facilities or contribute to off-site development within walking distance. Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.
- y. Require retail facilities or special event centers to offer travel incentives such as discounts on purchases for transit riders. Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site. Such a program to reduce air emissions in the Basin is not quantified by the SCAQMD and it is not given emission reduction credit in this impact analysis.¹⁷
- z. Provide on-site employee services such as cafeterias, banks, etc.
- aa. Establish a shuttle service from residential core areas to the work site. Mitigation not suitable for River Village because residential uses are proposed in close proximity and within walking distance to commercial uses proposed within River Village.
- ab. Construct on-site or off-site bus stops (e.g., bus turnouts, passenger benches, and shelters).
- ac. Implement a pricing structure for single-occupancy employee parking and/or provide discounts to ridesharers.
- ad. Include residential units within a commercial project.
- ae. Utilize parking in excess of code requirements as on-site park-n-ride lots or contribute to construction of off-site lots.

¹⁶ In 1988, the SCAQMD instituted Regulation XV that required enterprises with 100 or more employees to adopt trip reduction programs. The regulation required each employer to institute a trip reduction program that would achieve an Average Vehicle Ridership (AVR) of 1.75 in Downtown Los Angeles, 1.5 in the remainder of urbanized areas, and 1.3 in rural parts of the District. AVR measures the extent to which commuters use public transit, car pooling, and other multiple-occupant-vehicle modes of transportation. Regulation XV was repealed in December, 1995 and was replaced with Rule 2202 which provides options for employers to either continue trip reduction programs or reduce mobile source emissions through other strategies. As of January 1, 1997 Rule 2202 applies only to enterprises with 250 or more employees.

¹⁷ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-20.

- af. Any two of the following:
 - Construct off-site bicycle facility improvements, such as bicycle trails linking the facility to designated bicycle commuting routes, or on-site improvements, such as bicycle paths.
 - Include bicycle parking facilities, such as bicycle lockers and racks.
 - Include showers for bicycling employees' use.
- ag. Any two of the following:
 - Construct off-site pedestrian facility improvements, such as overpasses, wider sidewalks.
 - Construct on-site pedestrian facility improvements, such as building access which is physically separated from street and parking lot traffic and walk paths.
 - Include showers for pedestrian employees' use.
- ah. Provide shuttles to major rail transit stations and multi-modal centers.
- ai. Contribute to regional transit systems (e.g., right-of-way, capital improvements, etc.) . *This measure does not directly contribute to reduced air emissions, emission reductions have not been quantified,¹⁸ and it is not given emissions reduction credit in the impact analysis.¹⁹*
- aj. Charge visitors to park. *Mitigation not suitable for River Village because charging visitors to park at retail establishments would discourage patronage. Charging visitors to park at the office uses would encourage patrons to park in retail parking spaces or on the street. Charging visitors to pay for parking at the park site would encourage on-street parking.*
- ak. Synchronize traffic lights on streets impacted by development.
- al. Reschedule truck deliveries and pickups to off-peak hours. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.²⁰*
- am. Set up paid parking systems where drivers pay at walkup kiosk and exit via a stamped ticket to reduce emissions from queuing vehicles. *Mitigation not suitable for River Village because charging visitors to park at retail establishments would discourage patronage. Charging visitors to park at the office uses would encourage patrons to park in retail parking spaces or on the street. Charging visitors to pay for parking at the park site would encourage on-street parking. The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.²¹*
- an. Require on-site truck loading zones. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.²²*
- ao. Implement or contribute to public outreach programs. *Mitigation not suitable for the River Village applicant/developer because it is unclear as to what type of outreach program this mitigation measure refers. Furthermore, it is outside the purview of the project applicant/developer to set up such programs. Such programs are more appropriately set up and maintained by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site. Furthermore, the effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.²³*
- ap. Require employers not subject to Regulation XV (now Rule 2202) to provide commuter information area.

BUSINESS PARK USES

No Business Park uses are proposed within the River Village project.

- aq. Provide preferential parking spaces for carpools and vanpools and provide 7'2" minimum vertical clearance in parking facilities for vanpool access.
- ar. Implement on-site circulation plans in parking lots to reduce vehicle queuing.
- as. Set up resident worker training programs to improve job/housing balance.

¹⁸ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-18.

¹⁹ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

²⁰ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

²¹ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

²² South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

²³ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

- bx. Use energy-efficient low-sodium parking lot lights.

COMMERCIAL USES

- by. Use lighting controls and energy-efficient lighting.
- bz. Use fuel cells in residential subdivisions to produce heat and electricity.
- ca. Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting).
- cb. Use light-colored roofing materials to reflect heat.
- cc. Increase walls and attic insulation beyond Title 24 requirements.
- cd. Use solar or low emission water heaters.
- ce. Use central water heating systems.
- cf. Provide shade trees to reduce building heating/cooling needs.
- cg. Use energy-efficient and automated controls for air conditioners.
- ch. Use double-paned windows.
- ci. Use energy-efficient low-sodium parking lot lights.
- cj. Use lighting controls and energy-efficient lighting.
- ck. Use light-colored roofing materials to reflect heat.
- cl. Increase walls and attic insulation beyond Title 24 requirements.
- cm. Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting).

BUSINESS PARK USES

No Business Park uses are proposed within the River Village project.

- cn. Provide shade trees to reduce building heating/cooling needs.
- co. Use energy-efficient and automated controls for air conditioning.
- cp. Use double-paned windows.
- cq. Use energy-efficient low-sodium parking lot lights.
- cr. Use lighting controls and energy-efficient lighting.
- cs. Use light-colored roofing materials to reflect heat.
- ct. Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting).
- cu. Increase walls and attic insulation beyond Title 24 requirements.
- cv. Improved storage and handling of source materials.
- cw. Materials substitution (e.g., use water-based paints, life-cycle analysis).
- cx. Modify manufacturing processes (e.g., reduce process stages, closed-loop systems, materials recycling).
- cy. Resource recovery systems that redirect chemicals to new production processes.

- 4.10-10. All non-residential development of 25,000 gross square feet or more shall comply with the County's Transportation Demand Management (TDM) Ordinance (Ordinance No. 93-0028M) in effect at the time of subdivision. The sizes and configurations of the Specific Plan's non-residential uses are not known at this time and the Ordinance specifies different requirements based on the size of the project under review. All current provisions of the ordinance are summarized in Appendix 4.10.
- 4.10-11. Subdivisions and buildings shall comply with Title 24 of the California Code of Regulations which are current at the time of development.
- 4.10-12. Lighting for public streets, parking areas, and recreation areas shall utilize energy efficient light and mechanical, computerized or photo cell switching devices to reduce unnecessary energy usage.
- 4.10-13. Any on-site subterranean parking structures shall provide adequate ventilation systems to disperse pollutants and preclude the potential for a pollutant concentration to occur. *Mitigation not suitable for River Village because no subterranean parking structures are proposed within the project. Furthermore, this measure reduces indoor air pollutants, but does not effectively reduce air emissions within the Basin.*

- 4.10-14. The sellers of new residential units shall be required to distribute brochures and other relevant information published by the SCAQMD or similar organization to new homeowners regarding the importance of reducing vehicle miles traveled and related air quality impacts, as well as on local opportunities for public transit and ridesharing.

UNMITIGATED CONSTRUCTION EMISSIONS

Project Name River Village Unmitigated Emissions
 Subphase Weeks 1 thru 19
 Length of Subphase (weeks) 19.00
 Year 2006
 Total Acreage 120.28

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	130.69	182.74	18.98	1.69	19,407.42	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	130.69	182.74	18.98	1.69	5.36		
Off-Road Diesel Exhaust	130.69	182.74	18.98	1.69	65.65		
Worker Commute Trips	13.48	1.71	2.90	0.02	0.11		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	9,703.71	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Architectural Painting							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
SCAQMD Threshold:							
Exceeds Threshold?							
Yes	Yes	Yes	No	Yes			

Project Name River Village Unmitigated Emissions
 Subphase Weeks 20 thru 39
 Length of Subphase (weeks) 20.00
 Year 2006
 Total Acreage 126.61

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust					0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
Fugitive Dust					19,393.70	
On-Road Diesel Exhaust	130.69	182.74	18.98	1.69	3.30	
Off-Road Diesel Exhaust	1,841.01	226.11	1,521.55		65.65	
Worker Commute Trips	15.38	1.71	2.90	0.02	0.31	
Mitigation/Reduction						
Fugitive Dust					9,696.85	Fugitive Dust Rule 403
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions		1.01				
Off-Road Diesel Exhaust Emissions	1,332.50	167.28	1,176.24		46.72	
On-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
Worker Commute Emissions	23.98	2.36	12.29	0.14	0.28	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Building Construction and Architectural Coatings Subphase						
Building Construction						No Building Construction During This Subphase
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting						
Off-Gas Emissions		0.00				
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	3,368.20	582.35	2,688.18	1.88	9,813.02	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 40 thru 46
 Length of Subphase (weeks) 7.00
 Year 2006
 Total Acreage 44.31

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
Fugitive Dust	130.69	182.74	18.98	1.69	19,407.43	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	0.02	65.65		
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	0.11		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	Fugitive Dust Rule 403	
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11		
On-Road Diesel Exhaust Emissions	12.27	1.35	2.28	0.02	0.09		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,682.38	227.74	1,654.08	0.04	72.90	Fugitive Dust Rule 403	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18		
Architectural Painting							
Off-Gas Emissions	181.01	2.80	4.75	0.04	0.18		Fugitive Dust Rule 403
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		Fugitive Dust Rule 403
Exceeds Threshold?							
Yes	Yes	Yes	No	Yes			

Project Name River Village Unmitigated Emissions
 Subphase Weeks 47 thru 91
 Length of Subphase (weeks) 45.00
 Year 2006
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	-	-	-	-	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	-	-	-	-	-	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	-	-	-	-	21.98	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	-	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	-	-	-	-	-	
Fugitive Dust	-	-	-	-	10.99	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	-	1.01	-	-	-	
Off-Road Diesel Exhaust Emissions	1,382.30	167.28	1,126.24	-	46.72	
On-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
Worker Commute Emissions	12.27	1.35	2.28	0.02	0.09	
Mitigation/Reduction	-	-	-	-	-	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	222.74	1,634.08	-	72.90	
Worker Commute Trips	25.31	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions	-	151.01	-	-	-	
Worker Commute Trips	25.31	2.80	4.75	0.04	0.18	
Mitigation/Reduction	-	-	-	-	-	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	3,102.61	549.63	2,798.32	0.15	131.16	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Week 92
 Length of Subphase (weeks) 1.00
 Year 2007
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	1,379.05	1.01	1,082.87	0.01	31.93		
Off-Road Diesel Exhaust Emissions	4.03	0.61	5.89	0.01	0.10		
On-Road Diesel Exhaust Emissions	11.29	1.25	2.11	0.01	0.08		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	2,159.16	275.61	1,931.00	0.02	79.99		
Worker Commute Trips	28.13	3.11	5.26	0.02	0.21		
Architectural Painting							
Off-Gas Emissions	151.50	1.01	1,082.87	0.01	31.93		
Worker Commute Trips	28.13	3.11	5.26	0.02	0.21		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	3,603.81	603.46	3,035.29	0.06	122.52		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 93 thru 144
 Length of Subphase (weeks) 52.00
 Year 2007
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	--	--	--	--	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	--	--	--	--	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	--	0.02	--	--	--	
Off-Road Diesel Exhaust Emissions	1,373.05	167.28	1,885.87	--	41.93	
On-Road Diesel Exhaust Emissions	0.08	0.01	0.11	0.00	0.00	
Worker Commute Emissions	11.29	1.25	2.11	0.01	0.08	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,872.07	240.07	1,693.53	--	70.48	
Worker Commute Trips	24.90	2.75	4.63	0.02	0.18	
Architectural Painting						
Off-Gas Emissions	--	141.73	--	--	--	
Worker Commute Trips	24.90	2.75	4.63	0.02	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	3,306.30	555.86	2,790.95	0.05	112.86	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 145 thru 158
 Length of Subphase (weeks) 14.00
 Year 2008
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Paving and Asphalt Subphase						
Paving Off-Gas Emissions	1,385.56	167.28	1,058.33	38.46	0.10	
Off-Road Diesel Exhaust Emissions	3.70	0.57	5.39	0.01	0.08	
On-Road Diesel Exhaust Emissions	10.38	1.15	1.93	0.01	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,685.60	212.51	1,433.80	58.55	0.17	
Worker Commute Trips	20.77	2.30	3.89	0.02	0.12	
Architectural Painting						
Off-Gas Emissions	141.66	1.15	1.93	0.01	0.00	
Worker Commute Trips	20.77	2.30	3.89	0.02	0.12	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	3,126.78	528.79	2,527.25	0.05	97.52	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 159 thru 178
 Length of Subphase (weeks) 21.00
 Year 2009
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,726.62	212.51	1,394.94	0.03	53.47		
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17		
Architectural Painting							
Off-Gas Emissions	141.56	0.00	0.00	0.00	0.00		
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	1,764.79	358.43	1,402.06	0.03	53.80		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 179 thru 196
 Length of Subphase (weeks) 18.00
 Year 2009
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,515.09	187.20	1,239.14	0.03	48.23	
Worker Commute Trips	17.12	1.91	3.21	0.02	0.15	
Architectural Painting						
Off-Gas Emissions	141.24	1.91	3.21	0.02	0.15	
Worker Commute Trips	17.12	1.91	3.21	0.02	0.15	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	1,549.32	332.26	1,245.55	0.03	48.53	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 197 thru 210
 Length of Subphase (weeks) 13.00
 Year 2009
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Paving and Asphalt During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Paving and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Paving and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	1,041.33	128.61	880.48	0.02	33.06	
Off-Road Diesel Exhaust	11.51	1.29	2.16	0.01	0.10	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Architectural Painting	11.51	1.29	2.16	0.01	0.10	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	1,064.36	218.82	884.79	0.02	33.26	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 211 thru 220
 Length of Subphase (weeks) 10.00
 Year 2010
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	779.57	95.89	596.66	0.01	21.89		
Worker Commute Trips	7.50	0.64	1.39	0.01	0.07		
Architectural Painting							
Off-Gas Emissions	0.00	39.26	0.00	0.00	0.00		
Worker Commute Trips	7.50	0.64	1.39	0.01	0.07		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	794.57	134.83	596.44	0.01	22.03		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 221 thru 235
 Length of Subphase (weeks) 15.00
 Year 2010
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	491.65	59.17	372.96	0.00	13.54		
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04		
Architectural Painting							
Off-Gas Emissions	0.00	11.78	0.00	0.00	0.00		
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
SCAQMD Threshold:							
Exceeds Threshold?							

River Village Office Construction Only Unmitigated Emissions

Weeks of Construction: 140

Year Constr. Begins: 2015

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Grading Subphase							
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	894.12	106.21	663.11	-	23.88		
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08		
Architectural Painting							
Off-Gas Emissions	-	38.48	-	-	-		
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	905.93	147.09	669.17	0.03	24.03		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

MITIGATED CONSTRUCTION EMISSIONS

Project Name River Village Mitigated Emissions
 Subphase Weeks 1 thru 19
 Length of Subphase (weeks) 19.00
 Year 2006

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	130.69	182.74	18.98	1.69	19,407.42	Water Exposed Surfaces Three Times Daily Assumes Use of Aqueous Fuel, Cooled Exhaust Gas Recirculation Assumes Use of Aqueous Fuel, Cooled Exhaust Gas Recirculation No Feasible Mitigation Available
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	0.02	3.30	
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	65.65	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.11	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	1.69	2.64	
On-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	97.16	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	330.37	207.06	721.79	0.02	9,672.96	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
Subphase Weeks 20 thru 39
Length of Subphase (weeks) 20.00
Year 2006

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	150.69	182.74	18.98	1.69	19,393.79	Water Exposed Surfaces Three Times Daily Aqueous Fuel, Cooled Exhaust Gas Recirculation Aqueous Fuel, Cooled Exhaust Gas Recirculation No Feasible Mitigation Available
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	1.69	3.30	
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	0.11	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	1.69	9,696.85	
On-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	2.64	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	97.16	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	None Available Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Feasible Mitigation Available
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	23.98	2.96	12.29	0.11	0.28	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	4.00	0.58	3.35	0.06	0.09	
On-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	490.05	227.72	1,255.02	0.13	9,643.99	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
Subphase Weeks 40 thru 46
Length of Subphase (weeks) 7.00
Year 2006

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	130.69	182.74	18.98	1.69	19,402.42	Water Exposed Surfaces Three Times Daily
On-Road Diesel Exhaust	1,841.61	226.11	1,521.53	1.69	3.30	
Off-Road Diesel Exhaust	15.38	1.71	2.90	0.02	0.11	
Worker Commute Trips						
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	1.69	9,703.71	Aqueous Fuel, Cooled Exhaust Gas Recirculation
On-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	2.64	Aqueous Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	97.16	Aqueous Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips					0.00	No Feasible Mitigation Available
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	None Available
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	12.27	1.35	2.28	0.02	0.09	
Worker Commute Emissions						
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	4.00	0.38	3.35	0.06	0.09	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,682.38	222.74	1,654.08	0.00	72.90	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions		151.03				
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,514.14	200.47	893.20	0.00	107.89	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Gas Emissions		n/a				No Mitigation Available
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Net Emission Totals:	697.89	405.10	2,015.39	0.11	9,616.01	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
 Subphase Weeks 47 thru 91
 Length of Subphase (weeks) 45.00
 Year 2006

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	--	--	--	--	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
Fugitive Dust	--	--	--	--	21.98	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	10.99	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	--	1.01	--	--	--	
Off-Road Diesel Exhaust Emissions	1,332.50	167.28	1,126.24	--	46.72	
On-Road Diesel Exhaust Emissions	4.49	0.65	6.23	0.06	0.13	
Worker Commute Emissions	12.27	1.35	2.28	0.02	0.09	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	None Available
On-Road Diesel Exhaust	4.00	0.58	3.35	0.06	0.09	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	222.74	1,654.08	--	72.90	
Worker Commute Trips	25.51	2.90	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions	--	151.01	--	--	--	
Worker Commute Trips	25.51	2.90	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,514.14	200.47	893.20	0.00	107.89	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	367.22	198.03	1,293.59	0.09	-45.97	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	No Feasible Mitigation Available

Project Name River Village Mitigated Emissions
Subphase Week 92
Length of Subphase (weeks) 1.00
Year 2007

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,373.05	167.28	1,085.87	41.93	41.93	None Available
Off-Road Diesel Exhaust Emissions	4.05	0.61	5.80	0.01	0.10	
On-Road Diesel Exhaust Emissions	11.29	1.25	2.11	0.01	0.08	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	3.63	0.54	3.13	0.01	0.08	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
On-Road Diesel Exhaust	1,235.75	150.55	586.37	n/a	62.06	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	2,159.16	275.61	1,931.00	79.99	79.99	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	28.13	3.11	5.26	0.02	0.21	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	28.13	3.11	5.26	0.02	0.21	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Gas Emissions	1,943.24	248.05	1,642.74	0.00	118.39	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Mitigation Available
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	421.17	204.32	1,403.05	0.05	-58.00	
SCAQMD Threshold:	850.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
 Subphase Weeks 93 thru 144
 Length of Subphase (weeks) 52.00
 Year 2007

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,373.05	167.28	1,085.87	41.94		None Available
Off-Road Diesel Exhaust Emissions	0.08	0.01	0.11	0.00	0.00	
On-Road Diesel Exhaust Emissions	11.29	1.25	2.41	0.01	0.08	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.07	0.01	0.06	0.00	0.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
On-Road Diesel Exhaust	1,235.75	150.55	586.37	n/a	62.06	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Worker Commute Trips						
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,872.07	240.07	1,693.33	70.48		
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18	
Architectural Painting						
Off-Gas Emissions	141.73					
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18	No Mitigation Available
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,684.86	216.06	914.52	0.00	104.31	
Off-Gas Emissions	n/a					
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	385.62	189.23	1,290.00	0.05	-53.50	No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	190.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
 Subphase Weeks 145 thru 158
 Length of Subphase (weeks) 14.00
 Year 2008

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,385.56	167.28	1,058.35	0.01	38.46	None Available
Off-Road Diesel Exhaust Emissions	3.70	0.57	5.39	0.01	0.10	
On-Road Diesel Exhaust Emissions	10.38	1.15	1.94	0.01	0.08	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	3.33	0.51	2.91	0.01	0.08	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,247.00	150.55	571.51	n/a	56.92	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,685.60	212.51	1,453.90	0.02	58.55	
Worker Commute Trips	20.77	2.30	3.89	0.02	0.17	
Architectural Painting						
Off-Gas Emissions	1,517.04	191.26	785.05	0.00	86.65	
Worker Commute Trips	20.77	2.30	3.89	0.02	0.17	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,517.04	191.26	785.05	0.00	86.65	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	No Mitigation Available
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Net Emission Totals:	359.40	186.46	1,167.78	0.04	-46.13	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 159 thru 178
Length of Subphase (weeks) 21.00
Year 2009

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,726.62	212.31	1,394.91	0.00	53.47	
Worker Commute Trips	19.09	2.13	3.38	0.02	0.17	
Architectural Painting						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	19.09	2.13	3.38	0.02	0.17	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,553.96	191.26	753.25	0.00	79.14	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	210.84	167.17	648.81	0.03	-25.33	No Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Feasible Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 179 thru 196
Length of Subphase (weeks) 18.00
Year 2009

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	1,515.09	187.20	1,239.14	0.02	48.23	
Off-Road Diesel Exhaust	17.12	1.91	3.21	0.02	0.15	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	17.12	1.91	3.21	0.02	0.15	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	1,363.58	168.48	669.14	0.00	71.38	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	185.74	163.78	576.42	0.03	-22.85	No Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Feasible Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 197 thru 210
Length of Subphase (weeks) 13.00
Year 2009

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust					0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	--	--	--	--	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions		0.00		--	--	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	--	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Architectural Painting						
Off-Gas Emissions	--	67.64	--	--	--	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	23.03	90.21	4.31	0.02	0.20	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	No	No	No	

Project Name River Village Mitigated Emissions
 Subphase Weeks 211 thru 220
 Length of Subphase (weeks) 10.00
 Year 2010

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust					0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Paving and Asphalt Subphase						
Paving Off-Gas Emissions	--	0.00	--	--	--	No Paving and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	--	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07	
Architectural Painting						
Off-Gas Emissions	--	39.25	--	--	--	
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	15.00	40.94	2.78	0.01	0.14	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	No	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 221 thru 235
Length of Subphase (weeks) 15.00
Year 2010

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Off-Road Diesel Exhaust	491.65	59.17	372.96	0.00	13.64	
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04	
Architectural Painting						
Off-Gas Emissions	11.78	0.00	0.00	0.00	0.00	
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04	
Mitigation/Reduction						
Off-Road Diesel Exhaust	442.49	53.25	201.40	0.00	20.19	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	58.05	18.70	173.21	0.01	-6.46	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	Yes	No	No	

River Village Office Construction Only Mitigated Emissions

Weeks of Construction: 140

Year Constr. Begins: 2015

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Off-Road Diesel Exhaust	884.12	106.21	665.11	--	23.88	
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08	
Architectural Painting						
Off-Gas Emissions	--	38.48	--	--	--	
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08	
Mitigation/Reduction						
Off-Road Diesel Exhaust	795.71	95.59	359.16	0.00	35.34	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	110.22	51.50	318.01	0.03	-11.31	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	Yes	No	No	

URBEMIS2002
UNMITIGATED OPERATIONAL EMISSIONS
SUMMERTIME

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	78.83	31.65	21.52	0.17	0.08
TOTALS (lbs/day, mitigated)	77.29	26.13	10.61	0.00	0.05

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	342.42	391.84	4,155.89	2.47	377.33
TOTALS (lbs/day, mitigated)	342.41	391.82	4,155.68	2.47	377.31

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	421.25	423.49	4,177.40	2.65	377.40
TOTALS (lbs/day, mitigated)	419.69	417.94	4,166.29	2.47	377.36

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	2.40	31.52	13.20	-	0.06
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.97	0.13	8.32	0.17	0.02
Consumer Prdcts	75.46	-	-	-	-
TOTALS (lbs/day, unmitigated)	78.83	31.65	21.52	0.17	0.08

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	56.31	60.90	669.83	0.39	59.43
Apartments low rise	32.54	32.68	359.42	0.21	31.89
Condo/townhouse general	31.93	33.14	364.51	0.21	32.34
Elementary school	20.51	10.98	116.55	0.07	10.66
City park	0.71	0.49	5.16	0.00	0.47
Commercial Center 10-30 ac	91.46	120.96	1,259.13	0.76	115.66
Commercial Center <10 ac.	42.72	57.47	598.28	0.36	54.96
Commercial Shops	2.41	3.13	32.54	0.02	2.99
Commercial Office	63.82	72.09	750.48	0.45	68.94
TOTAL EMISSIONS (lbs/day)	342.42	391.84	4,155.89	2.47	377.33

Does not include correction for passby trips.
Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.90 trips / dwelling units	591.00	5,850.90
Apartments low rise	6.90 trips / dwelling units	455.00	3,139.50
Condo/townhouse general	8.00 trips / dwelling units	398.00	3,184.00
Elementary school	1.45 trips / students	750.00	1,087.50
City park	2.60 trips / acres	20.90	54.34
Commercial Center 10-30 ac	54.06 trips / 1000 sq. ft.	252.00	13,623.12
Commercial Center <10 ac.	85.06 trips / 1000 sq. ft.	76.10	6,473.07
Commercial Shops	37.06 trips / 1000 sq. ft.	9.50	352.07
Commercial Office	11.56 trips / 1000 sq. ft.	702.40	8,119.74

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
City park				5.0	2.5	92.5
Commercial Center 10-30 ac.				2.0	1.0	97.0
Commercial Center <10 ac.				2.0	1.0	97.0
Commercial Shops				2.0	1.0	97.0
Commercial Office				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The area source mitigation measure option switch changed from off to on.
The natural gas residential percentage changed from 60 to 100.
The percentage of wood stoves changed from 35 to 0.
The landscape length of the summer period (in days) changed from 180 to 365.
The landscape year changed from 2004 to 2007.
The consumer product persons per residential unit changed from 2.861 to 3.056.
Mitigation measure Orient Buildings North/South: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Rsdntl Lndscp Maint.
has been changed from off to on.
Mitigation measure Central Water Heater: Cmrc1 Space Heat.
has been changed from off to on.
Mitigation measure Orient Buildings North/South: Cmrc1 Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Cmrc1 Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Cmrc1 Lndscp Maint.
has been changed from off to on.

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2007.
The double counting internal work trip limit changed from to 791.577.
The double counting shopping trip limit changed from to 395.7885.
The double counting other trip limit changed from to 5234.992.
The travel mode environment settings changed from both to: both
Mitigation measure Mixed Use Project (Residential Oriented):3
has been changed from off to on.
Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1
has been changed from off to on.
Mitigation measure Provide Direct Pedestrian Connections:1
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety:0.5
has been changed from off to on.
Mitigation measure Provide Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Signalization and Signage:0.5
has been changed from off to on.
Mitigation measure Mixed Use Project (Commercial Oriented):1
has been changed from off to on.
Mitigation measure Floor Area Ratio 0.75 or Greater:1
has been changed from off to on.
Mitigation measure Provide Wide Sidewalks and Onsite Pedestrian Facilities:1
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Project Provides Shade Trees to Shade Sidewalks:0.5
has been changed from off to on.
Mitigation measure Project Provides Street Art and/or Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety Designs/Infrastructure at Crossings:0.5
has been changed from off to on.
Mitigation measure Articulated Storefront(s) Display Windows with Visual Interest:0.25
has been changed from off to on.
Mitigation measure No Long Uninterrupted Walls Along Pedestrian Walkways:0.25
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Secure Bicycle Parking:1
has been changed from off to on.
Mitigation measure Provide Employee Lockers and Showers:1
has been changed from off to on.
Mitigation measure Shuttle Bus Service to Transit/Multi-Modal Center:2
has been changed from off to on.
Mitigation measure Preferential Carpool/Vanpool Parking:1.5
has been changed from off to on.
Mitigation measure Many Frequently Needed Services Provided:5

has been changed from off to on.
Mitigation measuremitop5: Park and Ride Lots
has been changed from on to off.

URBEMIS2002
UNMITIGATED OPERATIONAL EMISSIONS
WINTERTIME

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	1,695.26	49.89	1,797.29	2.83	244.44
TOTALS (lbs/day, mitigated)	1,694.70	44.49	1,794.71	2.83	244.43

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	330.01	566.89	4,005.67	2.01	377.33
TOTALS (lbs/day, mitigated)	330.00	566.86	4,005.48	2.01	377.31

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	2,025.28	616.78	5,802.96	4.83	621.77
TOTALS (lbs/day, mitigated)	2,024.69	611.36	5,800.19	4.83	621.74

URBEMIS 2002 For Windows 7.5.0

ile Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 roject Name: River Village Operational Emissions
 roject Location: South Coast Air Basin (Los Angeles area)
 n-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Winter)

REA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	2.40	31.52	13.20	-	0.06
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	1,617.41	18.36	1,784.09	2.83	244.38
Landscaping - No winter emissions					
Consumer Prdcts	75.46	-	-	-	-
TOTALS(lbs/day,unmitigated)	1,695.26	49.89	1,797.29	2.83	244.44

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	52.80	88.27	633.57	0.32	59.43
Apartments low rise	28.40	47.36	339.97	0.17	31.89
Condo/townhouse general	28.77	48.03	344.78	0.18	32.34
Elementary school	9.34	15.91	110.82	0.06	10.66
City park	0.42	0.71	5.00	0.00	0.47
Commercial Center 10-30 ac	100.15	174.82	1,226.28	0.61	115.66
Commercial Center <10 ac.	47.56	83.07	582.67	0.29	54.96
Commercial Shops	2.59	4.52	31.69	0.02	2.99
Commercial Office	59.98	104.20	730.89	0.36	68.94
TOTAL EMISSIONS (lbs/day)	330.01	566.89	4,005.67	2.01	377.33

Does not include correction for passby trips.

Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.90 trips / dwelling units	591.00	5,850.90
Apartments low rise	6.90 trips / dwelling units	455.00	3,139.50
Condo/townhouse general	8.00 trips / dwelling units	398.00	3,184.00
Elementary school	1.45 trips / students	750.00	1,087.50
City park	2.60 trips / acres	20.90	54.34
Commercial Center 10-30 ac	54.06 trips / 1000 sq. ft.	252.00	13,623.12
Commercial Center <10 ac.	85.06 trips / 1000 sq. ft.	76.10	6,473.07
Commercial Shops	37.06 trips / 1000 sq. ft.	9.50	352.07
Commercial Office	11.56 trips / 1000 sq. ft.	702.40	8,119.74

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
City park				5.0	2.5	92.5
Commercial Center 10-30 ac.				2.0	1.0	97.0
Commercial Center <10 ac.				2.0	1.0	97.0
Commercial Shops				2.0	1.0	97.0
Commercial Office				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

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Mitigation measure Provide Secure Bicycle Parking:1
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Mitigation measure Provide Employee Lockers and Showers:1
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Mitigation measure Shuttle Bus Service to Transit/Multi-Modal Center:2
has been changed from off to on.
Mitigation measure Preferential Carpool/Vanpool Parking:1.5
has been changed from off to on.
Mitigation measure Many Frequently Needed Services Provided:5

age: 6

has been changed from off to on.

litigation measuremitop5: Park and Ride Lots

has been changed from on to off.

SUMMERTIME EMISSIONS REDUCTIONS

ESTIMATE SUMMERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Input Fields		Unmitigated Emissions in Pounds per Day			
LAND USE		CO	VOC	NO _x	PM ₁₀
Single Family Residential Uses	Vehicular Sources	669.49	56.25	66.94	56.43
	Area Sources	9.36	39.23	13.87	9.04
Multi-Family Residential Uses	Vehicular Sources	723.93	64.47	68.67	64.73
	Area Sources	7.36	38.82	9.21	6.03
Commercial/Office/Institutional Uses	Vehicular Sources	2,782.15	221.44	265.41	283.67
	Area Sources	4.80	0.80	9.79	6.93
Wood-Burning Fire Place Emissions	Vehicular Sources	0.93	0.00	0.04	0.03
	Area Sources	0.93	0.00	0.04	0.03
Total Emissions	Vehicular Sources	4,155.39	342.42	391.84	377.33
	Area Sources	21.52	78.84	31.64	0.09
Total Non-Reduced Emissions		4,177.41	421.26	423.48	377.42

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Stationary Sources											
All Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	10.0%	11.0%	9.5%	4.5%	1.74	8.58	2.08	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use built-in energy-efficient appliances	3.0%	2.5%	3.0%	6.5%	0.32	1.95	0.66	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	4.5%	4.5%	4.0%	2.5%	0.78	3.51	0.88	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use fuel cells in residential subdivisions to produce heat and elec.	1.0%	0.0%	1.5%	7.0%	0.17	0.00	0.33	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	13.5%	14.0%	13.0%	10.5%	2.35	10.93	2.85	0.01	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.5%	1.5%	1.5%	1.5%	0.26	1.17	0.33	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	13.0%	14.0%	13.0%	7.5%	2.26	10.93	2.85	0.01	
Multi-Family Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	8.5%	9.0%	8.0%	4.0%	0.00	0.00	0.00	0.00	Central heating systems are not desired by the average multi-family resident.
Commercial, Office, Institutional Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.5%	0.5%	0.5%	1.0%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	1.0%	1.0%	1.0%	1.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	3.0%	3.5%	3.0%	2.5%	0.12	0.03	0.25	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	7.0%	3.0%	8.5%	19.5%	0.29	0.02	0.82	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.0%	1.0%	1.0%	0.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	9.5%	10.0%	9.0%	7.0%	0.39	0.08	0.87	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	12.5%	11.0%	13.5%	17.5%	0.51	0.09	1.39	0.00	
Industrial Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	0.0%	0.0%	0.5%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.5%	0.0%	1.0%	2.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	2.5%	2.0%	3.0%	5.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	0.5%	0.0%	1.0%	3.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Improved storage and handling of source materials	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Materials substitution (e.g., use water-based paints, life cycle analysis)	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Utilize efficient manufacturing processes	1.5%	0.5%	2.0%	6.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Resource recovery systems	3.0%	3.5%	3.0%	1.5%	0.00	0.00	0.00	0.00	

ESTIMATED SUMMERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Mobile Sources											
Residential Uses											
	X	Allow satellite telecommunications centers in residential subdivisions	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Satellite telecommunications centers are superseded by other technology.
	X	Shuttle service from res. subdivisions to commercial core areas	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Residences are proposed in walking distance to proposed commercial areas.
	X	Construct bus passenger benches and shelters	0.2%	0.2%	0.2%	0.2%	2.79	0.24	0.25	0.25	
	X	Construct pedestrian facility improvements	0.1%	0.1%	0.1%	0.1%	1.39	0.12	0.13	0.12	
	X	Re-align services within or adjacent to residential subdivisions	1.3%	1.0%	1.3%	1.3%	18.12	1.21	1.65	1.61	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	1.39	0.12	0.13	0.12	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	55.75	4.83	5.07	4.95	
	X	Construct bicycle trails	0.1%	0.1%	0.1%	0.1%	1.39	0.12	0.13	0.12	
Commercial, Office and Institutional Uses											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide separate windows for fast-food restaurants	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide video-conference facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	No commercial retail or office use on site is expected to use fleet vehicles.
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	No commercial retail or office use on site is expected to use fleet vehicles.
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Lunch shuttle service from a worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	Mixed use lots are expected to have food establishments located within walking distance for employees.
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	The requirement to achieve a specific AVR has been ruled unlawful by the local government.
	X	Utilize satellite offices rather than regular worksite to reduce VMT	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Establish a home-based telecommuting program	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
	X	Other travel incentives such as discounts on purchases for transit riders	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	8.29	0.44	0.80	0.76	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	Residential uses are in close proximity and within walking distance to proposed commercial uses.
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Residential units within or adjacent to commercial developments	4.0%	3.1%	4.0%	4.0%	110.49	6.87	10.60	10.15	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	8.29	0.44	0.80	0.76	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	5.32	0.44	0.53	0.51	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Charge visitors to park	2.0%	1.5%	2.0%	2.0%	58.24	3.32	5.30	5.07	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	110.49	8.87	10.60	10.15	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Paid parking at walkup kiosks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide commuter information areas	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	Such programs are set up by and at the discretion of future occupants of the commercial uses.

ESTIMATED SUMMERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Industrial Uses											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement house dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide commuter information areas	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	
	X	Offer loans or other incentives to employees who move locally	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.00	0.00	0.00	0.00	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	0.00	0.00	0.00	0.00	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Lunch shuttle system from worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install aerodynamic add-on devices to heavy-duty trucks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce ship cruising speeds in the inner harbor	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low-emission fuels or electrify airport ground service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Engine tuning for marine vessels	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce number of aircraft engines used during idling	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install monitoring system to control airport shuttles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use centralized ground power systems for airport service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
Reduction in Stationary Sources Emissions (Pounds per day)							-9.56	-37.32	-13.62	-0.04	
Reduction in Mobile Sources Emissions (Pounds per day)							-395.72	-28.36	-37.57	-36.09	
Total Reduction in Emissions Based on Newhall Ranch FEIR Measures (Pounds per day)							-405.28	-65.68	-51.19	-36.13	
Percentage Reduced Based on Newhall Ranch FEIR Measures							-9.70%	-15.59%	-12.09%	-9.57%	
No Wood Burning Fire Places or Stoves in Residential Units							0.00	0.00	0.00	0.00	
Total Percent Reduction Based on Implementation of All Recommended Measures							-9.70%	-15.59%	-12.09%	-9.57%	
Total Reduced Stationary Source Emissions							11.96	41.52	18.02	0.05	
Total Reduced Mobile Source Emissions							3,760.17	314.06	354.27	341.24	
TOTAL REDUCED EMISSIONS							3,772.13	355.58	372.29	341.29	
SCAQMD Thresholds							550.00	55.00	55.00	150.00	
Project Air Quality Impacts Significant?							YES	YES	YES	YES	

WINTERTIME EMISSIONS REDUCTIONS

ESTIMATED WINTERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Input Fields		Unmitigated Emissions in Pounds per Day			
LAND USE		CO	VOC	NO _x	PM ₁₀
Single-Family Residential Uses	Vehicular Sources	683.87	52.80	88.27	98.43
	Area Sources	9.86	29.23	13.67	6.06
Multi-Family Residential Uses	Vehicular Sources	864.79	57.17	95.89	64.28
	Area Sources	7.56	34.82	8.27	0.92
Commercial/Office/Institutional Uses	Vehicular Sources	2,657.30	226.04	385.23	253.62
	Area Sources	1.18	0.83	9.70	0.02
Wood-Burning Fire Place Emissions	Vehicular Sources	0.00	0.00	0.00	0.00
	Area Sources	1,764.09	1,617.41	15.56	244.38
Total Emissions	Vehicular Sources	4,005.67	330.01	566.89	377.33
	Area Sources	1,805.61	1,696.25	50.00	244.47
Total Non-Reduced Emissions		5,811.28	2,026.26	616.89	621.80

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No		CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
MEASURES, EFFICIENCIES, AND REDUCTIONS											
Stationary Sources											
All Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	10.0%	11.0%	9.5%	4.5%	1.74	8.58	2.08	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use built-in energy-efficient appliances	3.0%	2.5%	3.0%	6.5%	0.52	1.95	0.66	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	4.5%	4.5%	4.0%	2.5%	0.78	3.51	0.88	0.00	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use fuel cells in residential subdivisions to produce heat and elec.	1.0%	0.0%	1.5%	7.0%	0.17	0.00	0.33	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	13.5%	14.0%	13.0%	10.5%	2.35	10.93	2.85	0.01	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.5%	1.5%	1.5%	1.5%	0.26	1.17	0.33	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	13.0%	14.0%	13.0%	7.5%	2.26	10.93	2.85	0.01	
Multi-Family Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	8.5%	9.0%	8.0%	4.0%	0.00	0.00	0.00	0.00	Central heating systems are not desired by the average multi-family resident.
Commercial, Office, Institutional Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.5%	0.5%	0.5%	1.0%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	1.0%	1.0%	1.0%	1.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	3.0%	3.5%	3.0%	2.5%	0.12	0.03	0.29	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	7.0%	3.0%	8.5%	19.5%	0.29	0.02	0.82	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.0%	1.0%	1.0%	0.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	9.5%	10.0%	9.0%	7.0%	0.39	0.08	0.87	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	12.5%	11.0%	13.5%	17.5%	0.51	0.09	1.31	0.00	
Industrial Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	0.0%	0.0%	0.5%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.5%	0.0%	1.0%	2.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	2.5%	2.0%	3.0%	5.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	0.5%	0.0%	1.0%	3.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Improved storage and handling of source materials	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Materials substitution (e.g., use water-based paints, life cycle analysis)	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Utilize efficient manufacturing processes	1.5%	0.5%	2.0%	6.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Resource recovery systems	3.0%	3.5%	3.0%	1.5%	0.00	0.00	0.00	0.00	

ESTIMATED WINTERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Mobile Sources											
Residential Uses											
	X	Allow satellite telecommunications centers in residential subdivisions	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such satellite telecommunications centers are superseded by other technology.
	X	Shuttle service from res. subdivisions to commercial core areas	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Residences are proposed in walking distance to proposed commercial areas.
	X	Construct bus passenger benches and shelters	0.2%	0.2%	0.2%	0.2%	2.64	0.22	0.37	0.25	
	X	Construct pedestrian facility improvements	0.1%	0.1%	0.1%	0.1%	1.32	0.11	0.18	0.12	
	X	Retail services within or adjacent to residential subdivisions	1.3%	1.0%	1.3%	1.3%	17.14	1.30	2.39	1.61	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	1.32	0.11	0.18	0.12	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	52.73	4.40	7.35	4.95	
	X	Construct bicycle trails	0.1%	0.1%	0.1%	0.1%	1.32	0.11	0.18	0.12	
Commercial, Office and Institutional Uses											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide separate windows for fast-food restaurants	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide video-conference facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	No commercial retail or office use on the site is expected to use fleet vehicles.
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	No commercial retail or office use on the site is expected to use fleet vehicles.
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Lunch shuttle service from a worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	Mixed use lots are expected to have food establishments located within walking distance for employees.
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	The requirement to achieve a specific AVR has been ruled unlawful by the federal government.
	X	Utilize satellite offices rather than regular worksite to reduce VMT	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Establish a home-based telecommuting program	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Offer travel incentives such as discounts on purchases for transit riders	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	8.06	0.44	1.15	0.76	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Residential uses are in close proximity and within walking distance to proposed commercial uses.
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Residential units within or adjacent to commercial developments	4.0%	3.1%	4.0%	4.0%	107.49	8.82	15.33	10.15	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	8.06	0.44	1.15	0.76	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	5.37	0.44	0.77	0.51	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Charge visitors to park	2.0%	1.5%	2.0%	2.0%	53.75	3.30	7.66	5.07	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	107.49	8.82	15.33	10.15	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Paid parking at walkup kiosks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide commuter information areas	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	Such programs are set up by and at the discretion of future occupants of the commercial uses.

ESTIMATED WINTERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Industrial Uses:											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide commuter information areas	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	
	X	Offer loans or other incentives to employees who move locally	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.00	0.00	0.00	0.00	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	0.00	0.00	0.00	0.00	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Lunch shuttle system from worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install aerodynamic add-on devices to heavy-duty trucks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce ship cruising speeds in the inner harbor	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low-emission fuels or electrify airport ground service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Engine tuning for marine vessels	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce number of aircraft engines used during idling	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install monitoring system to control airport shuttles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use centralized ground power systems for airport service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
Reduction in Stationary Sources Emissions (Pounds per day)							-9.56	-37.32	-13.62	-0.04	
Reduction in Mobile Sources Emissions (Pounds per day)							-382.82	-27.61	-64.34	-36.09	
Total Reduction in Emissions Based on Newhall Ranch FEIR Measures (Pounds per day)							-392.38	-64.93	-67.96	-36.13	
Percentage Reduced Based on Newhall Ranch FEIR Measures							-6.75%	-3.20%	-11.02%	-5.81%	
No Wood Burning Fire Places or Stoves in Residential Units							-1,784.09	-1,617.41	-18.35	-244.38	
Total Percent Reduction Based on Implementation of All Recommended Measures							-37.45%	-33.03%	-13.99%	-45.11%	
Total Reduced Stationary Source Emissions							11.96	41.52	18.02	0.05	
Total Reduced Mobile Source Emissions							3,622.85	302.40	512.55	341.24	
TOTAL REDUCED EMISSIONS							3,634.81	343.92	530.57	341.29	
SCAQMD Thresholds							550.00	55.00	55.00	150.00	
Project Air Quality Impacts Significant?							YES	YES	YES	YES	

ISCST3 Files

APPENDIX C

Calculations of Chronic Hazard Indices

Landmark Village EIR
Chronic Hazard Indices Calculations

Multiplying factor used in Cancer Risk Calculations:

40.96

Receptor	Risk (in one million)	Concentration ($\mu\text{g}/\text{m}^3$)	REL for DPM ($\mu\text{g}/\text{m}^3$)	Chronic Hazard Index
Residential	1.7	0.042	5	0.008
Workplace	1.2	0.029	5	0.006
Sensitive	0.3	0.007	5	0.001

REL: Reference Exposure Limit

DPM: Diesel Particulate Matter

(Adopted May 7, 1976) (Amended November 6, 1992)
(Amended July 9, 1993) (Amended February 14, 1997)
(Amended December 11, 1998)(Amended April 2, 2004)
(Amended June 3, 2005)

RULE 403. FUGITIVE DUST

(a) Purpose

The purpose of this Rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

(b) Applicability

The provisions of this Rule shall apply to any activity or man-made condition capable of generating fugitive dust.

(c) Definitions

- (1) ACTIVE OPERATIONS means any source capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, disturbed surface area, or heavy- and light-duty vehicular movement.
- (2) AGGREGATE-RELATED PLANTS are defined as facilities that produce and / or mix sand and gravel and crushed stone.
- (3) AGRICULTURAL HANDBOOK means the region-specific guidance document that has been approved by the Governing Board or hereafter approved by the Executive Officer and the U.S. EPA. For the South Coast Air Basin, the Board-approved region-specific guidance document is the Rule 403 Agricultural Handbook dated December 1998. For the Coachella Valley, the Board-approved region-specific guidance document is the Rule 403 Coachella Valley Agricultural Handbook dated April 2, 2004.
- (4) ANEMOMETERS are devices used to measure wind speed and direction in accordance with the performance standards, and maintenance and calibration criteria as contained in the most recent Rule 403 Implementation Handbook.
- (5) BEST AVAILABLE CONTROL MEASURES means fugitive dust control actions that are set forth in Table 1 of this Rule.

- (6) **BULK MATERIAL** is sand, gravel, soil, aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.
- (7) **CEMENT MANUFACTURING FACILITY** is any facility that has a cement kiln at the facility.
- (8) **CHEMICAL STABILIZERS** are any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law, rule or regulation. The chemical stabilizers shall meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.
- (9) **COMMERCIAL POULTRY RANCH** means any building, structure, enclosure, or premises where more than 100 fowl are kept or maintained for the primary purpose of producing eggs or meat for sale or other distribution.
- (10) **CONFINED ANIMAL FACILITY** means a source or group of sources of air pollution at an agricultural source for the raising of 3,360 or more fowl or 50 or more animals, including but not limited to, any structure, building, installation, farm, corral, coop, feed storage area, milking parlor, or system for the collection, storage, or distribution of solid and liquid manure; if domesticated animals, including horses, sheep, goats, swine, beef cattle, rabbits, chickens, turkeys, or ducks are corralled, penned, or otherwise caused to remain in restricted areas for commercial agricultural purposes and feeding is by means other than grazing.
- (11) **CONSTRUCTION/DEMOLITION ACTIVITIES** means any on-site mechanical activities conducted in preparation of, or related to, the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities: grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.
- (12) **CONTRACTOR** means any person who has a contractual arrangement to conduct an active operation for another person.
- (13) **DAIRY FARM** is an operation on a property, or set of properties that are contiguous or separated only by a public right-of-way, that raises cows or

produces milk from cows for the purpose of making a profit or for a livelihood. Heifer and calf farms are dairy farms.

- (14) **DISTURBED SURFACE AREA** means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas which have:
 - (A) been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;
 - (B) been paved or otherwise covered by a permanent structure; or
 - (C) sustained a vegetative ground cover of at least 70 percent of the native cover for a particular area for at least 30 days.
- (15) **DUST SUPPRESSANTS** are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.
- (16) **EARTH-MOVING ACTIVITIES** means the use of any equipment for any activity where soil is being moved or uncovered, and shall include, but not be limited to the following: grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, weed abatement through disking, and soil mulching.
- (17) **DUST CONTROL SUPERVISOR** means a person with the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule 403 requirements at an active operation.
- (18) **FUGITIVE DUST** means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of any person.
- (19) **HIGH WIND CONDITIONS** means that instantaneous wind speeds exceed 25 miles per hour.
- (20) **INACTIVE DISTURBED SURFACE AREA** means any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of 20 consecutive days.
- (21) **LARGE OPERATIONS** means any active operations on property which contains 50 or more acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of 3,850 cubic

meters (5,000 cubic yards) or more three times during the most recent 365-day period.

- (22) **OPEN STORAGE PILE** is any accumulation of bulk material, which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more square feet.
- (23) **PARTICULATE MATTER** means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.
- (24) **PAVED ROAD** means a public or private improved street, highway, alley, public way, or easement that is covered by typical roadway materials, but excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county, municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.
- (25) **PM₁₀** means particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.
- (26) **PROPERTY LINE** means the boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- (27) **RULE 403 IMPLEMENTATION HANDBOOK** means a guidance document that has been approved by the Governing Board on April 2, 2004 or hereafter approved by the Executive Officer and the U.S. EPA.
- (28) **SERVICE ROADS** are paved or unpaved roads that are used by one or more public agencies for inspection or maintenance of infrastructure and which are not typically used for construction-related activity.
- (29) **SIMULTANEOUS SAMPLING** means the operation of two PM₁₀ samplers in such a manner that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period which must be not less than 290 minutes and not more than 310 minutes.
- (30) **SOUTH COAST AIR BASIN** means the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange

County as defined in California Code of Regulations, Title 17, Section 60104. The area is bounded on the west by the Pacific Ocean, on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains, and on the south by the San Diego county line.

- (31) **STABILIZED SURFACE** means any previously disturbed surface area or open storage pile which, through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust and is demonstrated to be stabilized. Stabilization can be demonstrated by one or more of the applicable test methods contained in the Rule 403 Implementation Handbook.
- (32) **TRACK-OUT** means any bulk material that adheres to and agglomerates on the exterior surface of motor vehicles, haul trucks, and equipment (including tires) that have been released onto a paved road and can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
- (33) **TYPICAL ROADWAY MATERIALS** means concrete, asphaltic concrete, recycled asphalt, asphalt, or any other material of equivalent performance as determined by the Executive Officer, and the U.S. EPA.
- (34) **UNPAVED ROADS** means any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by typical roadway materials. Public unpaved roads are any unpaved roadway owned by federal, state, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.
- (35) **VISIBLE ROADWAY DUST** means any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
- (36) **WIND-DRIVEN FUGITIVE DUST** means visible emissions from any disturbed surface area which is generated by wind action alone.
- (37) **WIND GUST** is the maximum instantaneous wind speed as measured by an anemometer.

(d) **Requirements**

- (1) No person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that:

- (A) the dust remains visible in the atmosphere beyond the property line of the emission source; or
 - (B) the dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook), if the dust emission is the result of movement of a motorized vehicle.
- (2) No person shall conduct active operations without utilizing the applicable best available control measures included in Table 1 of this Rule to minimize fugitive dust emissions from each fugitive dust source type within the active operation.
- (3) No person shall cause or allow PM₁₀ levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for PM₁₀ monitoring. If sampling is conducted, samplers shall be:
 - (A) Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM₁₀.
 - (B) Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.
- (4) No person shall allow track-out to extend 25 feet or more in cumulative length from the point of origin from an active operation. Notwithstanding the preceding, all track-out from an active operation shall be removed at the conclusion of each workday or evening shift.
- (5) No person shall conduct an active operation with a disturbed surface area of five or more acres, or with a daily import or export of 100 cubic yards or more of bulk material without utilizing at least one of the measures listed in subparagraphs (d)(5)(A) through (d)(5)(E) at each vehicle egress from the site to a paved public road.
 - (A) Install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long.

- (B) Pave the surface extending at least 100 feet and at least 20 feet wide.
 - (C) Utilize a wheel shaker/wheel spreading device consisting of raised dividers (rails, pipe, or grates) at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
 - (D) Install and utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
 - (E) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the actions specified in subparagraphs (d)(5)(A) through (d)(5)(D).
 - (6) Beginning January 1, 2006, any person who operates or authorizes the operation of a confined animal facility subject to this Rule shall implement the applicable conservation management practices specified in Table 4 of this Rule.
- (e) Additional Requirements for Large Operations
- (1) Any person who conducts or authorizes the conducting of a large operation subject to this Rule shall implement the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards can not be met through use of Table 2 actions; and shall:
 - (A) submit a fully executed Large Operation Notification (Form 403 N) to the Executive Officer within 7 days of qualifying as a large operation;
 - (B) include, as part of the notification, the name(s), address(es), and phone number(s) of the person(s) responsible for the submittal, and a description of the operation(s), including a map depicting the location of the site;
 - (C) maintain daily records to document the specific dust control actions taken, maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request;

- (D) install and maintain project signage with project contact signage that meets the minimum standards of the Rule 403 Implementation Handbook, prior to initiating any earthmoving activities;
 - (E) identify a dust control supervisor that:
 - (i) is employed by or contracted with the property owner or developer;
 - (ii) is on the site or available on-site within 30 minutes during working hours;
 - (iii) has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule requirements;
 - (iv) has completed the AQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class; and
 - (F) notify the Executive Officer in writing within 30 days after the site no longer qualifies as a large operation as defined by paragraph (c)(18).
- (2) Any Large Operation Notification submitted to the Executive Officer or AQMD-approved dust control plan shall be valid for a period of one year from the date of written acceptance by the Executive Officer. Any Large Operation Notification accepted pursuant to paragraph (e)(1), excluding those submitted by aggregate-related plants and cement manufacturing facilities must be resubmitted annually by the person who conducts or authorizes the conducting of a large operation, at least 30 days prior to the expiration date, or the submittal shall no longer be valid as of the expiration date. If all fugitive dust sources and corresponding control measures or special circumstances remain identical to those identified in the previously accepted submittal or in an AQMD-approved dust control plan, the resubmittal may be a simple statement of no-change (Form 403NC).
- (f) **Compliance Schedule**
The newly amended provisions of this Rule shall become effective upon adoption. Pursuant to subdivision (e), any existing site that qualifies as a large operation will have 60 days from the date of Rule adoption to comply with the notification and recordkeeping requirements for large operations. Any Large Operation

Notification or AQMD-approved dust control plan which has been accepted prior to the date of adoption of these amendments shall remain in effect and the Large Operation Notification or AQMD-approved dust control plan annual resubmittal date shall be one year from adoption of this Rule amendment.

(g) Exemptions

- (1) The provisions of this Rule shall not apply to:
 - (A) Dairy farms.
 - (B) Confined animal facilities provided that the combined disturbed surface area within one continuous property line is one acre or less.
 - (C) Agricultural vegetative crop operations provided that the combined disturbed surface area within one continuous property line and not separated by a paved public road is 10 acres or less.
 - (D) Agricultural vegetative crop operations within the South Coast Air Basin, whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:
 - (i) voluntarily implements the conservation management practices contained in the Rule 403 Agricultural Handbook;
 - (ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Agricultural Handbook; and
 - (iii) makes the completed self-monitoring form available to the Executive Officer upon request.
 - (E) Agricultural vegetative crop operations outside the South Coast Air Basin whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:
 - (i) voluntarily implements the conservation management practices contained in the Rule 403 Coachella Valley Agricultural Handbook; and
 - (ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Coachella Valley Agricultural Handbook; and
 - (iii) makes the completed self-monitoring form available to the Executive Officer upon request.

- (F) Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency.
 - (G) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions.
 - (H) Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.
 - (I) Any grading contractor, for a phase of active operations, subsequent to the contractual completion of that phase of earth-moving activities, provided that the required control measures have been implemented during the entire phase of earth-moving activities, through and including five days after the final grading inspection.
 - (J) Weed abatement operations ordered by a county agricultural commissioner or any state, county, or municipal fire department, provided that:
 - (i) mowing, cutting or other similar process is used which maintains weed stubble at least three inches above the soil; and
 - (ii) any discing or similar operation which cuts into and disturbs the soil, where watering is used prior to initiation of these activities, and a determination is made by the agency issuing the weed abatement order that, due to fire hazard conditions, rocks, or other physical obstructions, it is not practical to meet the conditions specified in clause (g)(1)(H)(i). The provisions this clause shall not exempt the owner of any property from stabilizing, in accordance with paragraph (d)(2), disturbed surface areas which have been created as a result of the weed abatement actions.
 - (K) sandblasting operations.
- (2) The provisions of paragraphs (d)(1) and (d)(3) shall not apply:
- (A) When wind gusts exceed 25 miles per hour, provided that:

- (i) The required Table 3 contingency measures in this Rule are implemented for each applicable fugitive dust source type, and;
 - (ii) records are maintained in accordance with subparagraph (e)(1)(C).
 - (B) To unpaved roads, provided such roads:
 - (i) are used solely for the maintenance of wind-generating equipment; or
 - (ii) are unpaved public alleys as defined in Rule 1186; or
 - (iii) are service roads that meet all of the following criteria:
 - (a) are less than 50 feet in width at all points along the road;
 - (b) are within 25 feet of the property line; and
 - (c) have a traffic volume less than 20 vehicle-trips per day.
 - (C) To any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigative actions are in conflict with the federal Endangered Species Act, as determined in writing by the State or federal agency responsible for making such determinations.
- (3) The provisions of (d)(2) shall not apply to any aggregate-related plant or cement manufacturing facility that implements the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards of paragraphs (d)(1) and (d)(3) can not be met through use of Table 2 actions.
 - (4) The provisions of paragraphs (d)(1), (d)(2), and (d)(3) shall not apply to:
 - (A) Blasting operations which have been permitted by the California Division of Industrial Safety; and
 - (B) Motion picture, television, and video production activities when dust emissions are required for visual effects. In order to obtain this exemption, the Executive Officer must receive notification in writing at least 72 hours in advance of any such activity and no nuisance results from such activity.
 - (5) The provisions of paragraph (d)(3) shall not apply if the dust control actions, as specified in Table 2, are implemented on a routine basis for

each applicable fugitive dust source type. To qualify for this exemption, a person must maintain records in accordance with subparagraph (e)(1)(C).

- (6) The provisions of paragraph (d)(4) shall not apply to earth coverings of public paved roadways where such coverings are approved by a local government agency for the protection of the roadway, and where such coverings are used as roadway crossings for haul vehicles provided that such roadway is closed to through traffic and visible roadway dust is removed within one day following the cessation of activities.
- (7) The provisions of subdivision (e) shall not apply to:
 - (A) officially-designated public parks and recreational areas, including national parks, national monuments, national forests, state parks, state recreational areas, and county regional parks.
 - (B) any large operation which is required to submit a dust control plan to any city or county government which has adopted a District-approved dust control ordinance.
 - (C) any large operation subject to Rule 1158, which has an approved dust control plan pursuant to Rule 1158, provided that all sources of fugitive dust are included in the Rule 1158 plan.
- (8) The provisions of subparagraph (e)(1)(A) through (e)(1)(C) shall not apply to any large operation with an AQMD-approved fugitive dust control plan provided that there is no change to the sources and controls as identified in the AQMD-approved fugitive dust control plan.

(h) Fees

Any person conducting active operations for which the Executive Officer conducts upwind/downwind monitoring for PM₁₀ pursuant to paragraph (d)(3) shall be assessed applicable Ambient Air Analysis Fees pursuant to Rule 304.1. Applicable fees shall be waived for any facility which is exempted from paragraph (d)(3) or meets the requirements of paragraph (d)(3).

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Backfilling	01-1 Stabilize backfill material when not actively handling; and 01-2 Stabilize backfill material during handling; and 01-3 Stabilize soil at completion of activity.	9 Mix backfill soil with water prior to moving 9 Dedicate water truck or high capacity hose to backfilling equipment 9 Empty loader bucket slowly so that no dust plumes are generated 9 Minimize drop height from loader bucket
Clearing and grubbing	02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and 02-2 Stabilize soil during clearing and grubbing activities; and 02-3 Stabilize soil immediately after clearing and grubbing activities.	9 Maintain live perennial vegetation where possible 9 Apply water in sufficient quantity to prevent generation of dust plumes
Clearing forms	03-1 Use water spray to clear forms; or 03-2 Use sweeping and water spray to clear forms; or 03-3 Use vacuum system to clear forms.	9 Use of high pressure air to clear forms may cause exceedance of Rule requirements
Crushing	04-1 Stabilize surface soils prior to operation of support equipment; and 04-2 Stabilize material after crushing.	9 Follow permit conditions for crushing equipment 9 Pre-water material prior to loading into crusher 9 Monitor crusher emissions opacity 9 Apply water to crushed material to prevent dust plumes

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Cut and fill	05-1 Pre-water soils prior to cut and fill activities; and	9 For large sites, pre-water with sprinklers or water trucks and allow time for penetration
	05-2 Stabilize soil during and after cut and fill activities.	9 Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts
Demolition – mechanical/manual	06-1 Stabilize wind erodible surfaces to reduce dust; and	9 Apply water in sufficient quantities to prevent the generation of visible dust plumes
	06-2 Stabilize surface soil where support equipment and vehicles will operate; and	
	06-3 Stabilize loose soil and demolition debris; and	
	06-4 Comply with AQMD Rule 1403.	
Disturbed soil	07-1 Stabilize disturbed soil throughout the construction site; and	9 Limit vehicular traffic and disturbances on soils where possible
	07-2 Stabilize disturbed soil between structures	9 If interior block walls are planned, install as early as possible 9 Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
Earth-moving activities	08-1 Pre-apply water to depth of proposed cuts; and	9 Grade each project phase separately, timed to coincide with construction phase 9 Upwind fencing can prevent material movement on site 9 Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
	08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and	
	08-3 Stabilize soils once earth-moving activities are complete.	

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Importing/exporting of bulk materials	09-1 Stabilize material while loading to reduce fugitive dust emissions; and 09-2 Maintain at least six inches of freeboard on haul vehicles; and 09-3 Stabilize material while transporting to reduce fugitive dust emissions; and 09-4 Stabilize material while unloading to reduce fugitive dust emissions; and 09-5 Comply with Vehicle Code Section 23114.	9 Use tarps or other suitable enclosures on haul trucks 9 Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage 9 Comply with track-out prevention/mitigation requirements 9 Provide water while loading and unloading to reduce visible dust plumes
Landscaping	10-1 Stabilize soils, materials, slopes	9 Apply water to materials to stabilize 9 Maintain materials in a crusted condition 9 Maintain effective cover over materials 9 Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes 9 Hydroseed prior to rain season
Road shoulder maintenance	11-1 Apply water to unpaved shoulders prior to clearing; and 11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	9 Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs 9 Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Screening	12-1 Pre-water material prior to screening; and 12-2 Limit fugitive dust emissions to opacity and plume length standards; and 12-3 Stabilize material immediately after screening.	9 Dedicate water truck or high capacity hose to screening operation 9 Drop material through the screen slowly and minimize drop height 9 Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point
Staging areas	13-1 Stabilize staging areas during use; and 13-2 Stabilize staging area soils at project completion.	9 Limit size of staging area 9 Limit vehicle speeds to 15 miles per hour 9 Limit number and size of staging area entrances/exits
Stockpiles/ Bulk Material Handling	14-1 Stabilize stockpiled materials. 14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	9 Add or remove material from the downwind portion of the storage pile 9 Maintain storage piles to avoid steep sides or faces

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Traffic areas for construction activities	15-1 Stabilize all off-road traffic and parking areas; and 15-2 Stabilize all haul routes; and 15-3 Direct construction traffic over established haul routes.	9 Apply gravel/paving to all haul routes as soon as possible to all future roadway areas 9 Barriers can be used to ensure vehicles are only used on established parking areas/haul routes
Trenching	16-1 Stabilize surface soils where trencher or excavator and support equipment will operate; and 16-2 Stabilize soils at the completion of trenching activities.	9 Pre-watering of soils prior to trenching is an effective preventive measure. For deep trenching activities, pre-trench to 18 inches soak soils via the pre-trench and resuming trenching 9 Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment
Truck loading	17-1 Pre-water material prior to loading; and 17-2 Ensure that freeboard exceeds six inches (CVC 23114)	9 Empty loader bucket such that no visible dust plumes are created 9 Ensure that the loader bucket is close to the truck to minimize drop height while loading
Turf Overseeding	18-1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and 18-2 Cover haul vehicles prior to exiting the site.	9 Haul waste material immediately off-site

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Unpaved roads/parking lots	19-1 Stabilize soils to meet the applicable performance standards; and 19-2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	9 Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements
Vacant land	20-1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

Table 2
DUST CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Earth-moving (except construction cutting and filling areas, and mining operations)	<p>(1a) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR</p> <p>(1a-1) For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.</p>
Earth-moving: Construction fill areas:	<p>(1b) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.</p>

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Earth-moving: Construction cut areas and mining operations:	(1c) Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b) Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c) Apply chemical stabilizers within five working days of grading completion; OR (2d) Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed surface areas	(3a) Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR (3b) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (3c) Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR (3d) Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Unpaved Roads	(4a) Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR (4b) Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR (4c) Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	(5a) Apply chemical stabilizers; OR (5b) Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR (5c) Install temporary coverings; OR (5d) Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.
All Categories	(6a) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used.

TABLE 3
CONTINGENCY CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY	CONTROL MEASURES
Earth-moving	(1A) Cease all active operations; OR (2A) Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	(0B) On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR (1B) Apply chemical stabilizers prior to wind event; OR (2B) Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR (3B) Take the actions specified in Table 2, Item (3c); OR (4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	(1C) Apply chemical stabilizers prior to wind event; OR (2C) Apply water twice per hour during active operation; OR (3C) Stop all vehicular traffic.
Open storage piles	(1D) Apply water twice per hour; OR (2D) Install temporary coverings.
Paved road track-out	(1E) Cover all haul vehicles; OR (2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	(1F) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

Table 4
(Conservation Management Practices for Confined Animal Facilities)

SOURCE CATEGORY	CONSERVATION MANAGEMENT PRACTICES
Manure Handling (Only applicable to Commercial Poultry Ranches)	(1a) Cover manure prior to removing material off-site; AND (1b) Spread the manure before 11:00 AM and when wind conditions are less than 25 miles per hour; AND (1c) Utilize coning and drying manure management by removing manure at laying hen houses at least twice per year and maintain a base of no less than 6 inches of dry manure after clean out; or in lieu of complying with conservation management practice (1c), comply with conservation management practice (1d). (1d) Utilize frequent manure removal by removing the manure from laying hen houses at least every seven days and immediately thin bed dry the material.
Feedstock Handling	(2a) Utilize a sock or boot on the feed truck auger when filling feed storage bins.
Disturbed Surfaces	(3a) Maintain at least 70 percent vegetative cover on vacant portions of the facility; OR (3b) Utilize conservation tillage practices to manage the amount, orientation and distribution of crop and other plant residues on the soil surface year-round, while growing crops (if applicable) in narrow slots or tilled strips; OR (3c) Apply dust suppressants in sufficient concentrations and frequencies to maintain a stabilized surface.
Unpaved Roads	(4a) Restrict access to private unpaved roads either through signage or physical access restrictions and control vehicular speeds to no more than 15 miles per hour through worker notifications, signage, or any other necessary means; OR (4b) Cover frequently traveled unpaved roads with low silt content material (i.e., asphalt, concrete, recycled road base, or gravel to a minimum depth of four inches); OR (4c) Treat unpaved roads with water, mulch, chemical dust suppressants or other cover to maintain a stabilized surface.
Equipment Parking Areas	(5a) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (5b) Apply material with low silt content (i.e., asphalt, concrete, recycled road base, or gravel to a depth of four inches).

Construction Health Risk Assessment for Landmark Village

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May 2006

SUMMARY

This assessment evaluates the health impacts due to diesel exhaust particulate matter (DPM) emitted by diesel trucks and equipment associated with construction of the Landmark Village project (proposed project). The proposed project site is bounded by State Route 126 (SR-126) on the northern boundary and by the Santa Clara River on the southern boundary. The proposed project will consist of 308 single-family residential units; 685 condominiums; 451 apartments; 337,600 square feet (sq. ft.) of retail area; 695,400 sq. ft. of office space; 70,000 sq. ft. of school buildings; and 16.1 acres of park area. Total development is anticipated to occur over a 251-week period. Also, a utility corridor extending approximately 39,800 feet in length and 35 feet wide was considered as a part of the proposed project. The utility corridor includes the infrastructure components for potable water, sewer, reclaimed water, and natural gas. The sources of DPM include on-road trucks and diesel-powered construction equipment like front-end loaders, bulldozers, and scrapers.

The South Coast Air Quality Management District (SCAQMD) recommends the following significance criteria for health risk assessments:

- Criterion 1: a greater than 10 in 1 million (10×10^{-6}) lifetime probability of contracting cancer; and
- Criterion 2: a health hazard index of 1.0 for evaluating the non-carcinogenic effects of toxic air contaminants.

Using SCAQMD's thresholds of significance, the health risk assessment finds that the maximum anticipated cancer risks associated with the construction of the proposed project are 1.2, 1.7, and 0.3 in 1 million at workplace, residential, and sensitive receptors, respectively. The assessment also finds that the chronic hazard indices for non-cancer health impacts are well below 1.0 at the maximally exposed receptors under this construction scenario. The health impacts associated with the construction of the proposed project are below the significance criteria and are, therefore, less than significant.

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1.0 GENERAL

On August 27, 1998, the California Air Resources Board (CARB) designated particulate emissions from diesel-fueled engines or DPM as a toxic air contaminant. The proposed construction of the proposed project will involve diesel trucks and diesel-powered mobile equipment. This health risk assessment evaluates the risk from DPM to determine if it is significant under CEQA.

The SCAQMD *California Environmental Quality Act (CEQA) Air Quality Handbook*¹ recommends a lifetime probability of contracting cancer greater than 10 in 1 million (10×10^{-6}) as a significance threshold for evaluating health impacts from toxic air contaminants. The *CEQA Air Quality Handbook* further identifies a health hazard index of 1.0 as an additional significance threshold for evaluating non-carcinogenic effects of toxic air contaminants.

1.1 Project Description

The proposed development at Landmark Village is within the South Coast Air Basin, which is under the jurisdiction of SCAQMD. The proposed project consists of 308 single-family residential units; 685 condominiums; 451 apartments; 337,600 sq. ft. of retail area; 695,400 sq. ft. of office space; 70,000 sq. ft. of school buildings; and 16.1 acres of park area. The construction of the utility corridor that provides the infrastructure components such as potable water, reclaimed water, sewer, and natural gas is also considered part of the proposed project. Total development is anticipated to occur over a 251-week period. The construction schedule is mainly divided into three phases: grading, asphalt paving, and building construction. Grading and asphalt paving are anticipated to occur during the first 75 weeks, and the building construction phase is anticipated to occur from week 76 to week 251. The construction of the utility corridor will occur over 52-week period starting in week one along with grading and asphalt paving. The construction of the utility corridor is also divided in three different phases: grading, grading and water tanks construction, and grading and water tanks welding and coating. These three phases are anticipated to occur over the first 30 weeks, week 31 to week 48, and week 49 to week 52, respectively. Currently, the project site is either used for agricultural crop production or is vacant, and no demolition is required. The project site is bounded by SR-126 on the northern boundary and by the Santa Clara River on the southern boundary. Two soil borrow areas are proposed in the vicinity of the northern and southern boundary of the project site.

¹ CEQA Air Quality Handbook, South Coast Air Quality Management District, April 1993.

2.0 SOURCE DESCRIPTION

Figure 1, Conceptual Site Plan, shows the site plan for the proposed project. For this analysis, the whole site is modeled as an area source consisting of DPM emissions from truck and construction equipment.

The on- and off-road vehicles and equipment that emit DPM and are associated with construction of the proposed project include:

- Diesel-fueled construction equipment (e.g., scrapers, tractors, backhoes, rollers);
- Heavy-duty diesel trucks (e.g., haul trucks and on-site water trucks)

These sources will travel through the proposed development area depending on the construction phases which include grading, building construction, application of architectural coatings, and asphalt paving. For modeling purposes, the whole site is divided into five parts. Every part is considered as a separate area source, and it is assumed that the diesel trucks and construction equipment will operate throughout the whole area. Similarly, the utility corridor is divided into 10 different parts to facilitate modeling. Also, every part of the utility corridor is considered as a separate area source, and it is assumed that the diesel trucks and construction equipment will operate throughout the utility corridor. **Table 1**, below, provides information about the area sources.

Table 1
Source Description

Area Source ID	No. of Vertices	Area in sq. m.
I	20	218,351.3
II	13	222,649.6
III	20	204,169.9
IV	13	286,594.2
V	18	286,522.8
UCHRA1	12	278,253.3
UCHRA2	20	289,227.3
UCHRA3	10	455,337.6
UCHRA4	11	95,374.2
UCHRA5	4	173,353.3
UCHRA6	4	311,792.2
UCHRA7	4	216,796.2
UCHRA8	8	89,050.6
UCHRA9	9	82,513.9
UCHRA10	10	74,962.8

Source: Impact Sciences, Inc., 2006.

In the site-grading phase, the trucks will haul earth material from the borrow site and will dump their loads on site. The typical on-site round-trip travel distance was estimated to be 4 miles. The typical workday was estimated to be 10 hours (i.e., from 8 AM to 6 PM).

3.0 CALCULATION OF EMISSIONS

Unmitigated construction emissions were estimated based on the information provided in the *Software Users' Guide: URBEMIS2002 for Windows with Enhanced Construction Module* (April 2005)² (Guide) (the assumptions are available for review in **Appendix 4.9** of the EIR). URBEMIS2002 is a land-use and transportation-based air quality model developed in cooperation with the CARB and designed to estimate air emissions from new development projects, including construction emissions. The model is designed to calculate emissions for specific air basins; for this project, the model was run using model inputs designed specifically for the South Coast Air Basin.

The information regarding different construction activities (site clearing, grading, asphalt paving, and application of architectural coatings) was provided by the project applicant. Also, the applicant provided details about the types and numbers of construction equipment that would be on the site during grading operations, the acreages graded, the amount of material that would be graded, and the timing and duration of the grading and construction operations. Additional details regarding these calculations are provided in **Section 4.9, Air Quality**, in the Landmark Village Draft Environmental Impact Report (DEIR). The number of working days in a particular phase was calculated assuming 5 working days each week, with a 10-hour working day (i.e., 8 AM to 6 PM). DPM emissions for each phase were calculated by multiplying total working days by the worst-case daily emissions. Finally, DPM emissions from all the phases were added to get total DPM emissions over the entire construction period. For the purpose of this assessment, the overall emissions during the six-year construction period were averaged to generate one annual average emission rate to be used as an input for the dispersion modeling. A similar approach is used to calculate the emissions from the construction of the utility corridor. DPM emissions from all the phases associated with the utility corridor construction were added to get the annual DPM emissions.

The estimated emissions for each phase and for the overall project are shown in **Table 2, Estimated Diesel Particulate Matter Emissions from Construction**. As shown in **Table 2**, the emissions vary from year to year depending on the area of development and the phase of the construction activity.

² Jones and Stokes. *Software Users' Guide: URBEMIS2002 for Windows with Enhanced Construction Module* (Sacramento, California: Jones and Stokes, April 2005).

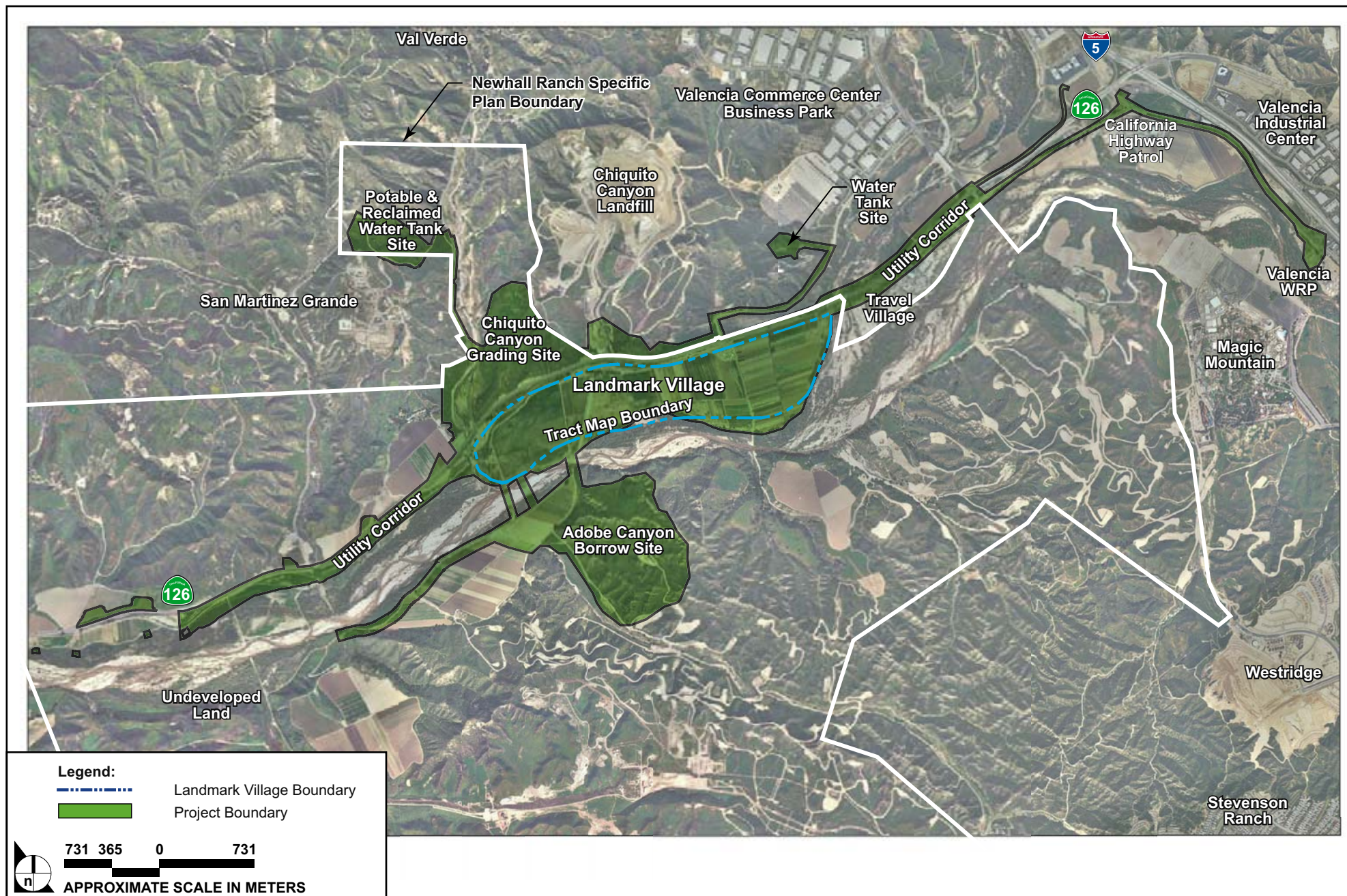


FIGURE 1

Conceptual Site Plan

Table 2
Estimated Diesel Particulate Matter Emissions
from Construction Operations

				Emissions	
Phase	Source	Schedule (weeks)	Duration (weeks)	On Worst-Day (lbs/day)	Per Phase (lbs)
A	On-Road Diesel Exhaust	1 to 44	44	2.13	468.60
	Off-Road Diesel Exhaust			36.17	7,957.40
B	On-Road Diesel Exhaust	45 to 48	4	2.13	53.25
	Off-Road Diesel Exhaust			36.25	906.25
C	On-Road Diesel Exhaust	49 to 58	10	0	0
	Off-Road Diesel Exhaust			6.36	318.00
D	On-Road Diesel Exhaust	59 to 62	4	0.28	5.60
	Off-Road Diesel Exhaust			10.90	218.00
E	On-Road Diesel Exhaust	63 to 75	13	0.28	18.20
	Off-Road Diesel Exhaust			4.67	303.55
F	On-Road Diesel Exhaust	76 to 127	52	0	0
	Off-Road Diesel Exhaust			89.66	23,311.60
G	On-Road Diesel Exhaust	128	1	0	0
	Off-Road Diesel Exhaust			94.45	472.25
H	On-Road Diesel Exhaust	129 to 179	51	0	0
	Off-Road Diesel Exhaust			74.15	18,908.25
I	On-Road Diesel Exhaust	180 to 214	45	0	0
	Off-Road Diesel Exhaust			65.77	14,798.25
J	On-Road Diesel Exhaust	215 to 232	18	0	0
	Off-Road Diesel Exhaust			61.01	5,490.90
K	On-Road Diesel Exhaust	233 to 238	6	0	0
	Off-Road Diesel Exhaust			40.14	1,204.20
L	On-Road Diesel Exhaust	239 to 240	2	0	0
	Off-Road Diesel Exhaust			31.89	318.90
M	On-Road Diesel Exhaust	241 to 251	11	0	0
	Off-Road Diesel Exhaust			23.64	1,300.20
Total					76,053.40
UC1	On-Road Diesel Exhaust	1 to 30	30	0.02	0.60
	Off-Road Diesel Exhaust			2.18	65.40
UC2	On-Road Diesel Exhaust	31 to 48	18	0.02	0.36
	Off-Road Diesel Exhaust			2.80	50.40
UC3	On-Road Diesel Exhaust	49 to 52	4	0.02	0.08
	Off-Road Diesel Exhaust			5.94	23.76
Total					140.60

Source: Impact Sciences, Inc., 2006.

4.0 MODELING METHODOLOGY

4.1 Modeling Approach

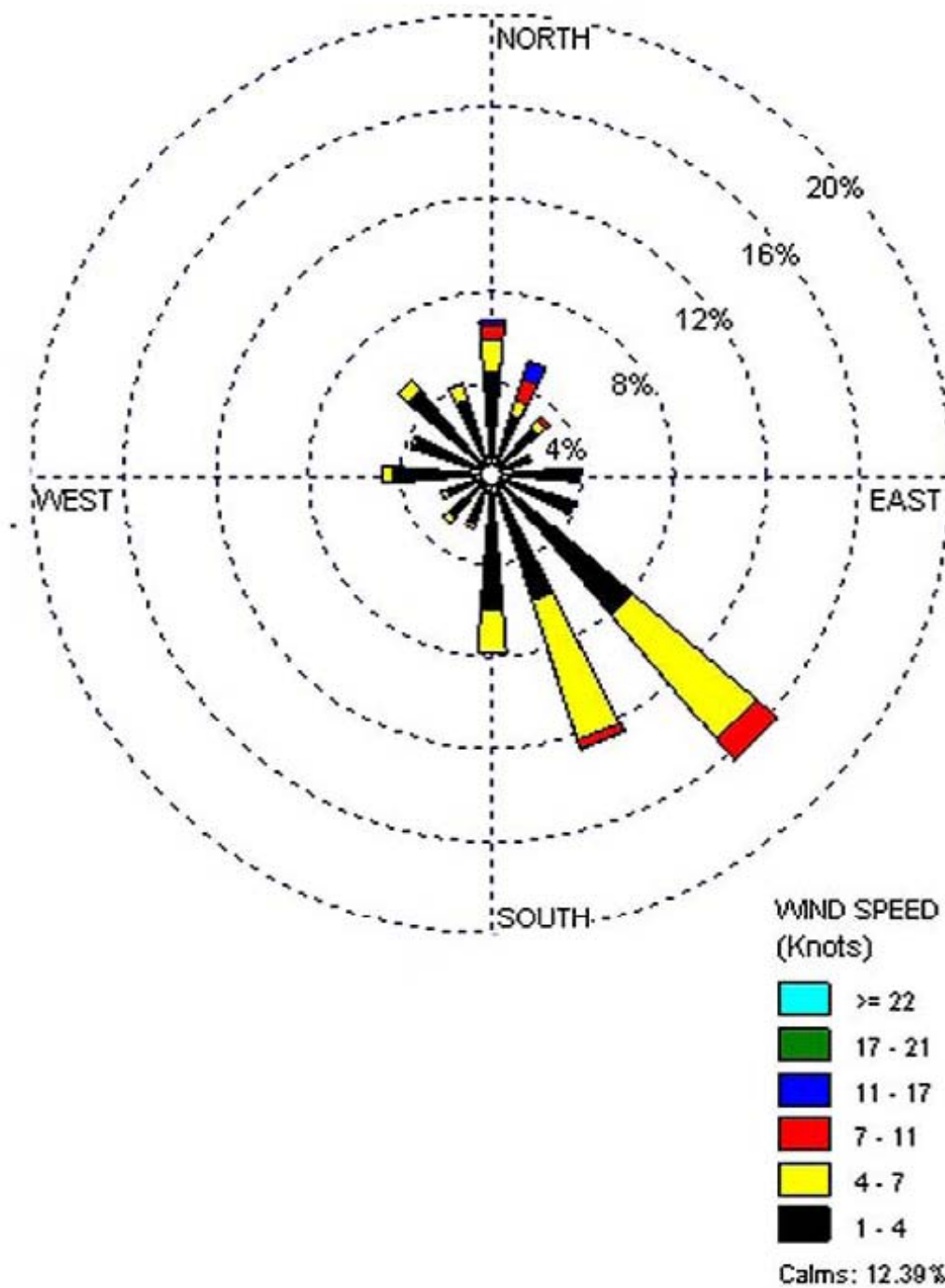
The U.S. Environmental Protection Agency (U.S. EPA) approved Industrial Source Complex model, ISCST3³, was used to model the air quality impacts of DPM emissions during construction of the proposed project and construction of the utility corridor. This model can estimate the air quality impacts of single or multiple sources using actual meteorological conditions.

The model was configured with the following control parameters:

- Modeling switches: regulatory default (except calms processing was turned off per SCAQMD guidelines);
- Averaging period: annual; and
- Choice of dispersion coefficients based upon land-use type: urban (per SCAQMD health risk assessment guidelines).

The 1981 meteorological data used in the modeling analysis was obtained from the SCAQMD website for the Newhall monitoring station. The Newhall meteorological monitoring site is about 7.5 kilometers east-southeast of the project site and is the closest meteorological monitoring station to the proposed project site. A wind rose illustrating prevailing wind speeds and directions is shown in **Figure 2, Wind Rose for the Newhall Monitoring Station**.

Sources of emissions from trucks and construction equipment were modeled as five area sources over the proposed project site. (These five areas were selected for purposes of the Localized Significance Thresholds Analysis, which was also performed for this project, but they are not intended to represent phasing of the construction over the project site.) The annual emission rate over the six-year construction period was converted to grams per second (g/sec) by dividing the annual emission rate by the annual operating hours and 3,600 seconds per hour, and by multiplying the result by 453.6 grams per pound. The overall emissions were distributed over the five area sources proportional to their areas. The corresponding emission rate for each area source in g/sec was divided by the area of each of the area sources as measured in square meters to calculate the emission rate in grams per second per square meter (g/sec-m²). Thus, the emissions from the trucks and construction equipment were assumed to be distributed equally throughout these areas, as is the convention for area source emissions. Similarly, the sources of emissions associated with construction of the utility corridor were modeled as 10 area sources distributed over the utility corridor site. (These area sources were selected to facilitate the model



SOURCE: Impact Sciences, Inc. – May 2006

FIGURE 2



Wind Rose for the Newhall Monitoring Station

simulation and are not intended to represent the phasing of the construction over the project site.) Also, the overall emissions associated with construction of the utility corridor were distributed over the utility corridor site, and the emission rate was calculated in g/sec-m² using the same method described earlier.

The emissions from the trucks and equipment were given an initial height of 4.15 meters to account for the height of the exhaust stack and initial plume rise of the heated exhaust. This value is used by the CARB to characterize the health impacts of a variety of scenarios involving diesel vehicles.

4.2 Receptors Used for Evaluating Modeled Impacts

The nearest residential community to the project site is the community of Val Verde located approximately 1.6 kilometers (1 mile) to the north, across SR-126. Other residences are scattered throughout the area, primarily to the north of the site across SR-126. A recreational vehicle park is located to the east of the project site; however, occupants are limited to a 30-day stay. The nearest potential off-site workplace receptors are located to the northeast in the Valencia Commerce Center.

The SCAQMD *CEQA Air Quality Handbook* recommends that sensitive receptors be evaluated in an air quality impact analysis. Sensitive receptors are generally considered to be facilities where children, the elderly, or ill people may reside. The *CEQA Air Quality Handbook* lists the following land uses that should be considered as sensitive receptors:

- Long-term health care facilities
- Rehabilitation centers
- Convalescent centers
- Retirement homes
- Residences
- Schools
- Playgrounds
- Child care centers
- Athletic facilities

For the purpose of this assessment, potential sensitive receptors included schools, childcare centers, and hospitals.

One elementary school is located within 2 kilometers (1.25 miles) of the project site. Its name, location, and distance from the project site are shown in **Table 3, Sensitive Receptors within Two Kilometers of**

the Landmark Village Project Site and its location is depicted in Figure 3, Sensitive Receptors Near the Project Site. No childcare centers or hospitals were identified within 2 kilometers of the project site. The school was treated as a discrete receptor in this analysis, and it was located within the modeled area within a Cartesian grid that was spaced at 100-meter intervals up to 2,000 meters (2.0 kilometers) from the project site boundary. The overall receptor grid was designed to cover areas of existing and future off-site residential exposure, areas of commercial/industrial development, to allow assessment of potential workplace exposure, and potential exposure to other sensitive receptors listed in the SCAQMD CEQA Air Quality Handbook.

Table 3
Sensitive Receptors within Two Kilometers
of Landmark Village Project Site

Name of Receptor	Distance from Landmark Village (km)	Direction
Live Oak Elementary School	1.68	North

Source: Impact Sciences, 2006.

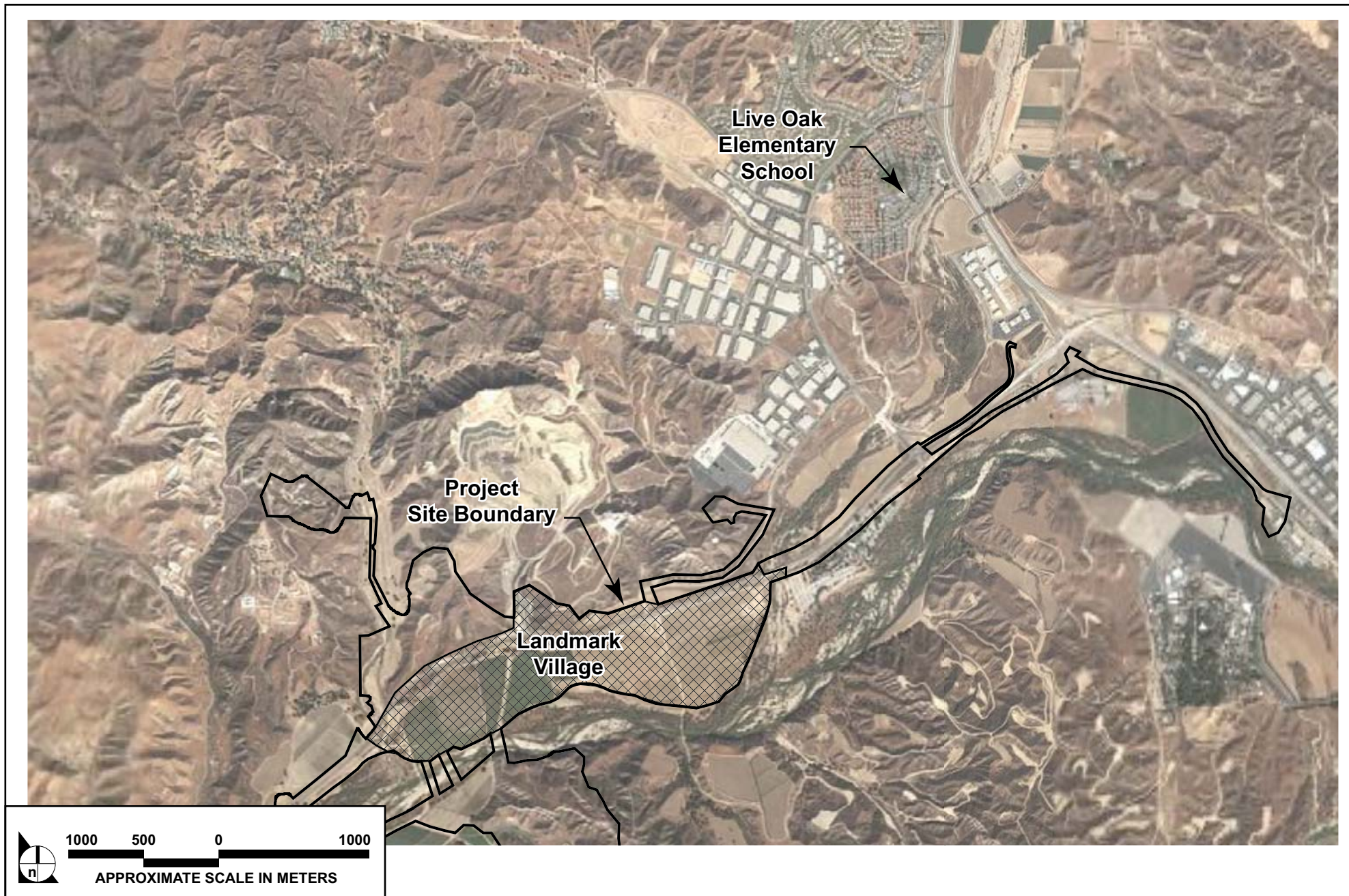
5.0 ESTIMATION OF EXPOSURE THROUGH INHALATION

This assessment considers exposure via inhalation only. The potential exposure through other pathways (e.g., ingestion) requires substance and site-specific data, and the specific parameters for DPM are not known for these pathways.⁴ This assessment also assumes that a person is exposed continuously for 70 years. This approach is intended to result in conservative (i.e., health protective) estimates of health impacts. The SCAQMD follows the recommendation in the Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*⁵ (OEHHA Guidance) with respect to the evaluation of cancer risk calculations for short-term exposures (i.e., less than a maximum theoretical project life of 70 years). The OEHHA Guidance states:

"[A]s the exposure duration decreases the uncertainties introduced by applying cancer potency factors derived from very long term studies increases. Short-term high exposures are not necessarily equivalent to longer-term lower exposures even when the total dose is the same. OEHHA therefore does not support the use of current cancer potency factor to evaluate cancer risk for exposures of less than 9 years. If such risk must be evaluated, we recommend assuming that average daily dose for short-term exposure is assumed to last for a minimum of 9 years."

⁴ "Report to the Air Resources Board on the Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Part A Exposure Assessment," Approved by the Scientific Review Panel, April 1998.

⁵ "Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments," California Environmental Protection Agency Office of Environmental Health Hazard Assessment, August 2003.



SOURCE: Impact Sciences, Inc. – May 2006

FIGURE 3

Sensitive Receptors Near the Project Site

Exposure through inhalation is a function of the respiration rate and the concentration of a substance in the air and is calculated by using the following formulas:⁶

$$\text{Risk} = \text{Dose-inhalation} * \text{Inhalation cancer potency factor (Equation 1)}$$

where:

$$\text{Inhalation cancer potency factor (CPF)} = 1.1 \text{ (milligram per kilogram per day)}^{-1} \text{ (for DPM)}$$

$$\text{Dose Inhalation} = C_{\text{air}} * \text{DBR} * A * \text{EF} * \text{ED} * 10^{-6} / \text{AT (Equation 2)}$$

where:

C_{air} = concentration in microgram per cubic meter

DBR = breathing rate in liter per kilogram of body weight per day

A = inhalation absorption factor (1 for DPM)

EF = exposure frequency in days per year

ED = exposure duration in years

AT = averaging time period over which exposure is averaged in days (25,550 days for 70 years)

For modeling purpose, the default values suggested by the manual were used for the dose inhalation calculation except for daily breathing rate. The default values used in the model are as follows:

EF = 350 days/year

ED = 9 years

AT = 25,550 days

A = 1

In accordance with CARB policy⁷, a breathing rate equal to the 80th percentile should be used in single-point risk management decisions, such as those subject to a threshold or standard, for which the cancer risk is entirely associated with inhalation and residential cancer risk is being evaluated. These two criteria are met for this assessment. Thus, a breathing rate of 302 liter per kilogram of body weight per day was used for the residential cancer risk calculations.

The risk is calculated by multiplying the dose by the inhalation potency factor. The inhalation potency factor for DPM is 1.1.⁸ In order to directly calculate risk as a modeling output, a multiplying factor was derived based on the information discussed above. This multiplying factor, when multiplied by the

⁶ Ibid.

⁷ California Air Resources Board and Office of Environmental Health Hazard Assessment, *Recommended Interim Risk Management Policy for Inhalation-Based Residential Cancer Risk*, October 9, 2003.

⁸ "Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments," California Environmental Protection Agency Office of Environmental Health Hazard Assessment, pp. 7-4, August 2003.

concentration that the dispersion model calculates, results in risk in 1 million at a particular receptor. The multiplying factor was calculated as follows:

$$\begin{aligned}\text{Multiplying factor} &= \text{CPF} * (\text{DBR} * \text{A} * \text{EF} * \text{ED} * 10^{-6} / \text{AT}) * 10^6 \\ &= 1.1 * (302 \text{ L/kg body weight-day} * 1 * 350 \text{ day/yr} * 9 \text{ yr} * 10^{-6} / 25,550 \text{ days}) * 10^6 = 40.96 (\mu\text{g}/\text{m}^3)^{-1}\end{aligned}$$

Table 4, Summary of Maximum Modeled Cancer Risks of Diesel Particulate Matter from Construction, provides the model output. **Figure 4, Modeled Impacts of Diesel Particulate Matter**, illustrates the potential risks due to DPM from the construction of the proposed development. **Figure 4** shows the isopleths (lines of constant modeled excess cancer risk) that represent estimated cancer risks of 5 and 10 in 1 million for residential and sensitive receptors. These isopleths reflect the cancer risk at residential receptors; no adjustment has been made to the isopleths for workplace exposures, which would be lower.

Table 4
Summary of Maximum Modeled
Cancer Risks of Diesel Particulate Matter
from Construction

Receptor	Cancer Risk
Residence ¹	1.7×10^{-6}
Sensitive ²	0.3×10^{-6}
Workplace ³	1.2×10^{-6}

Source: Impact Sciences, Inc., 2006.

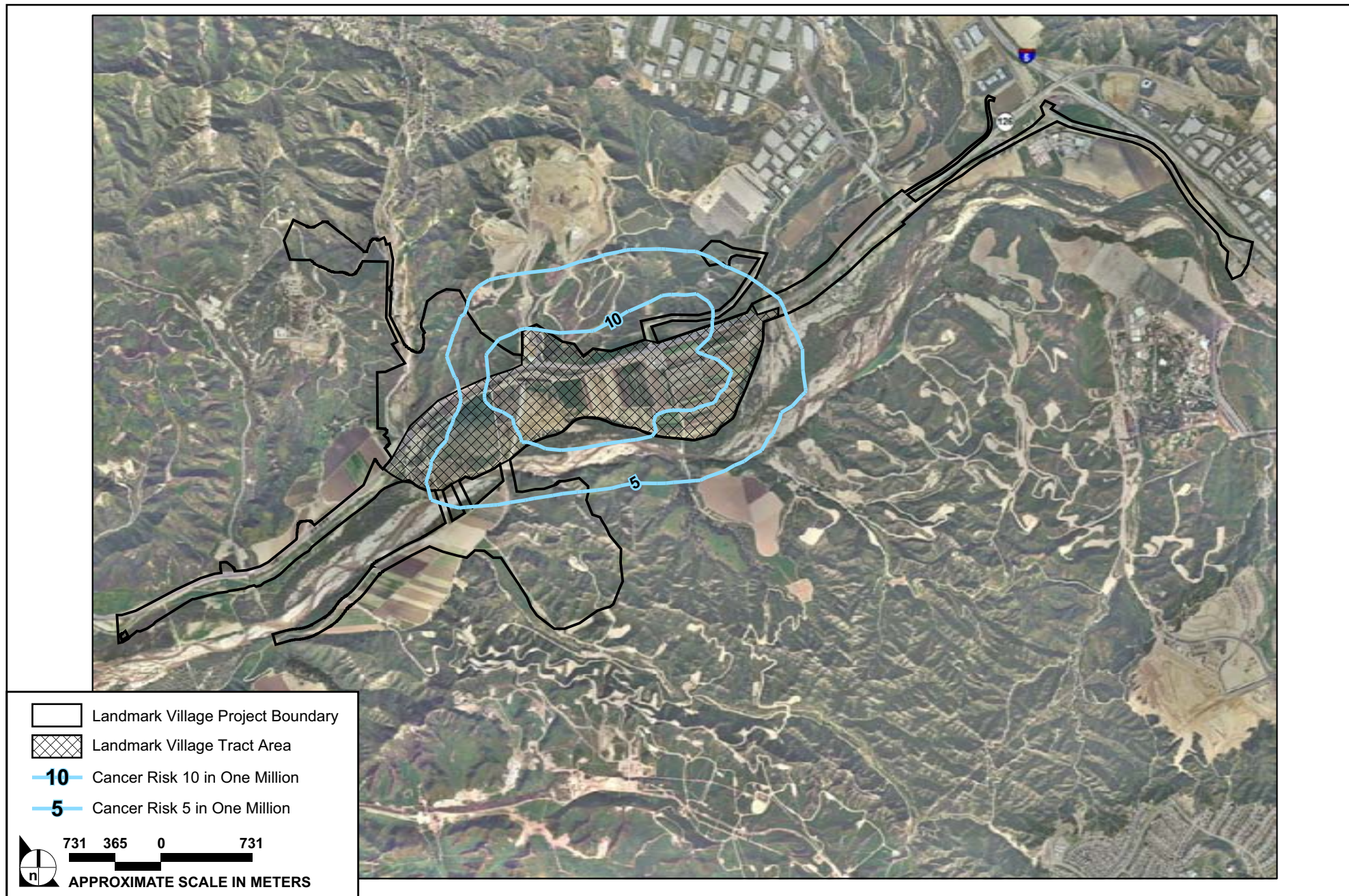
¹ Maximum impact occurred at Val Verde;

² Maximum impact occurred at Live Oak Elementary School;

³ Maximum impact occurred at Commerce Center Commercial.

In addition to the potential cancer risk, DPM has chronic (i.e., long-term) noncancer health impacts. The chronic noncancer inhalation hazard indices for the proposed project were calculated by dividing the modeled annual average concentrations of the DPM by the Reference Exposure Level (REL). The OEHHHA has recommended an ambient concentration of 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) as the chronic inhalation REL for DPM. The REL is the concentration at or below which no adverse health effects are anticipated. No inhalation REL for acute (i.e., short-term) effects has been determined by the OEHHHA.

While calculating cancer risks associated with DPM from construction, the multiplying factor was used to generate the results directly in terms of cancer risk in 1 million. Therefore, the model did not calculate



SOURCE: Impact Sciences, Inc. – May 2006

FIGURE 4

Model Impacts of Diesel Particulate Matter

the concentrations separately. However, the concentrations are required to calculate the chronic non-cancer inhalation hazard indices. Therefore, the concentrations were calculated by dividing the risk values by the multiplying factor. These concentrations were then further divided by RELs to calculate chronic non-cancer inhalation hazard indices.

The maximum chronic hazard indices at selected receptors are shown in **Table 5, Summary of Maximum Modeled Noncancer Health Impacts of Diesel Exhaust Particulate Matter from Construction**. The net chronic hazard indices at the points of maximum impact are much less than the SCAQMD significance threshold of 1.0 for noncancer health impacts. The areas of maximum non-cancer impact occurred in the same locations as those described above for the cancer risks.

Table 5
Summary of Maximum Modeled Noncancer Health Impacts
of Diesel Particulate Matter from Construction

Receptor	Chronic Hazard Index
Residential ¹	0.0008
Sensitive ²	0.0001
Workplace ³	0.0006

Source: Impact Sciences, Inc., 2006.

¹ *Maximum impact occurred at Val Verde;*

² *Maximum impact occurred at Live Oak Elementary School;*

³ *Maximum impact occurred at Commerce Center Commercial.*

6.0 CONCLUSIONS

Based on this analysis, construction of the proposed project would not exceed the SCAQMD significance threshold of a cancer risk of 10 in 1 million since the maximum net anticipated cancer risks are 1.2, 1.7, and 0.3 in 1 million at workplace, residential, and sensitive receptors, respectively. The chronic hazard indices for non-cancer health impacts are also well below the significance threshold of 1.0 at the maximally exposed receptors. It should be noted that these health impacts do not reflect the reductions in diesel emissions from trucks and mobile equipment that will occur during the construction period as a result of increasingly stringent emission standards, many of which will take effect in the next few years. Furthermore, the activity levels (e.g., types and numbers of construction equipment) used in this assessment represent the highest *daily* levels anticipated during each phase of the construction of the project; the actual levels are likely to be lower. Accordingly, the actual health impacts due to construction of the proposed project would be less than those presented in this assessment.

APPENDIX A

Landmark Village Construction Emissions

Estimated Unmitigated Utility Corridor Construction Emissions

Subphase/Emissions Source	Emissions (lbs/day)				
	CO	VOC	NO _x	SO _x	PM ₁₀
Weeks 1 thru 30					
Unmitigated Emissions Total	85.90	11.38	62.83	0	296.80
SCAQMD Thresholds	550	75	100	150	150
Exceeds Thresholds?	NO	NO	NO	NO	YES
Notes: Grading of utility corridor					
Weeks 31 thru 48					
Unmitigated Emissions Total	110.80	14.30	80.34	0	297.42
SCAQMD Thresholds	550	75	100	150	150
Exceeds Thresholds?	NO	NO	NO	NO	YES
Notes: Grading of utility corridor and construction of water tanks					
Weeks 49 thru 52					
Unmitigated Emissions Total	184.25	58.96	152.37	0	300.57
SCAQMD Thresholds	550	75	100	150	150
Exceeds Thresholds?	NO	NO	YES	NO	YES
Notes: Grading of utility corridor and welding and coating of water tanks					

Source: Impact Sciences, Inc.

NEWHALL RANCH SPECIFIC PLAN FINAL EIR AIR QUALITY MITIGATION MEASURES

The following air quality mitigation measures are from the Newhall Ranch Specific Plan Final EIR. These measures, as appropriate, are intended to apply to all future development within Newhall Ranch. Not all of the following measure are appropriate for River Village and comments on the appropriateness of each measure to the River Village project is noted in *italics*.

- 4.10-1. The Specific Plan will provide Commercial and Service uses in close proximity to residential subdivisions.
- 4.10-2. The Specific Plan will locate residential uses in close proximity to Commercial uses, Mixed-Uses, and Business Parks.
- 4.10-3. Bus pull-ins will be constructed throughout the Specific Plan site.
- 4.10-4. Pedestrian facilities, such as sidewalks, and community regional, and local trails, will be provided throughout the Specific Plan site.
- 4.10-5. Roads with adjacent trails for pedestrian and bicycle use will be provided throughout the Specific Plan site connecting the individual Villages and community.
- 4.10-6. The applicant of future subdivisions shall implement all rules and regulations adopted by the Governing Board of the SCAQMD which are applicable to the development of the subdivision (such as Rule 402 - Nuisance, Rule 403 - Fugitive Dust, Rule 1113 - Architectural Coatings) and which are in effect at the time of development. The purpose of Rule 403 is to reduce the amount of particulate matter entrained in the ambient air as a result of man-made fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or man-made condition capable of generating fugitive dust such as the mass and remedial grading associated with the project as well as weed abatement and stockpiling of construction materials (*i.e.*, rock, earth, gravel). Rule 403 requires that grading operations either (1) take actions specified in Tables 1 and 2 of the Rule for each applicable source of fugitive dust and take certain notification and record keeping actions; or (2) obtain an approved Fugitive Dust Control Plan. A complete copy of the SCAQMD's Rule 403 Implementation Handbook, which has been included in Appendix 4.10, provides guideline tables to demonstrate the typical mitigation program and record keeping required for grading operations (Tables 1 and 2 and sample record keeping chart). The record keeping is accomplished by on-site construction personnel, typically the construction superintendent.

Each future subdivision proposed in association with the Newhall Ranch Specific Plan shall implement the following if found applicable and feasible for that subdivision.

GRADING

- a. Apply non-toxic soil stabilizers according to manufacturers' specification to all inactive construction areas (previously graded areas inactive for ten days or more).
- b. Replace groundcover in disturbed areas as quickly as possible.
- c. Enclose, cover, water twice daily, or apply non-toxic soil binders according to manufacturers' specifications, to exposed piles (*i.e.*, gravel, sand, dirt) with 5 percent or greater silt content.
- d. Water active sites at least twice daily.
- e. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.
- f. Monitor for particulate emissions according to District-specified procedures.
- g. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (*i.e.*, minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of CVC Section 23114.

The effectiveness of these measures at reducing PM10 emissions ranges from 7 to 74 percent.¹

¹ South Coast Air Quality Management District, *CEQA Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-15 and p. A11-77.

PAVED ROADS

- h. Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water).
- i. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.

The effectiveness of these measures at reducing PM10 emissions ranges from 25 to 70 percent.²

UNPAVED ROADS

- j. Apply water three times daily, or non-toxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas or unpaved road surfaces.
- k. Reduce traffic speeds on all unpaved roads to 15 mph or less.
- l. Pave construction roads that have a traffic volume of more than 50 daily trips by construction equipment, 150 total daily trips for all vehicles.
- m. Pave all construction access roads at least 100 feet on to the site from the main road.
- n. Pave construction roads that have a daily traffic volume of less than 50 vehicular trips.

The effectiveness of these measures at reducing PM10 emissions ranges from 40 to 92.5 percent.³

- 4.10-7. Prior to the approval of each future subdivision proposed in association with the Newhall Ranch Specific Plan, each of the construction emission reduction measures indicated below (and in Tables 11-2 and 11-3 of the SCAQMD's CEQA *Air Quality Handbook*, as amended) shall be implemented if found applicable and feasible for that subdivision.

ON-ROAD MOBILE SOURCE CONSTRUCTION EMISSIONS:

- a. Configure construction parking to minimize traffic interference. *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.⁴*
- b. Provide temporary traffic controls when construction activities have the potential to disrupt traffic to maintain traffic flow (e.g., signage, flag person, detours). *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.⁵*
- c. Schedule construction activities that affect traffic flow to off-peak hours (e.g., between 7:00 P.M. and 6:00 A.M. and between 10:00 A.M. and 3:00 P.M.). *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.⁶*
- d. Develop a trip reduction plan to achieve a 1.5 average vehicle ridership (AVR) for construction employees. *Mitigation not suitable for River Village because SCAQMD Rule 2202 applies to all employers who meet certain criteria for implementing trip reduction measures. The requirement to achieve a specific AVR has been ruled unlawful by the federal government and is no longer recommended.*
- e. Implement a shuttle service to and from retail services and food establishments during lunch hours. *Mitigation not suitable for River Village because construction workers typically take a half-hour lunch at various times of the day and eat on-site food that was either brought by the workers (brown bag) or purchased from mobile caterers who travel to the site.*
- f. Develop a construction traffic management plan that includes the following measures to address construction traffic that has the potential to affect traffic on public streets:
 - Rerouting construction traffic off congested streets *Mitigation not suitable for River Village because the only access to the site is via SR-126 and there are no other roadways on which to reroute traffic.;*
 - Consolidating truck deliveries; and
 - Providing temporary dedicated turn lanes for movement of construction trucks and equipment on and off of the site. *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.⁷*

² South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-15 and pp. A11-77 to -78.

³ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-16 and p. A11-78.

⁴ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

⁵ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

⁶ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

- g. Prohibit truck idling in excess of two minutes. *Mitigation not suitable for River Village because the nature of diesel motors does not lend them to constant turning on and off. Premature wear, and increased air emissions from turning the engines on and off, are common results. It is also extremely difficult to effectively monitor the implementation of this measure on an approximately 700-acre site with contractors who would be concerned about maintaining their equipment. Furthermore, the effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.*⁸

OFF-ROAD MOBILE SOURCE CONSTRUCTION EMISSIONS:

- h. Use methanol-fueled pile drivers. *Any equipment that utilizes an alternative fuel that reduces VOC, NOx, and/or PM10 emissions is advisable. This measure is replaced in the impact analysis with another measure that considers other alternative fuels for diesel-fueled construction equipment.*
- i. Suspend use of all construction equipment operations during second stage smog alerts. *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.*⁹
- j. Prevent trucks from idling longer than two minutes. *Mitigation not suitable for River Village because the nature of diesel motors does not lend them to constant turning on and off. Premature wear, and increased air emissions from turning the engines on and off, are common results. It is also extremely difficult to effectively monitor the implementation of this measure on an approximately 700-acre site with contractors who would be concerned about maintaining their equipment. Furthermore, the effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.*¹⁰
- k. Use electricity from power poles rather than temporary diesel-powered generators.
- l. Use electricity from power poles rather than temporary gasoline-powered generators.
- m. Use methanol- or natural gas-powered mobile equipment instead of diesel. *Any equipment that utilizes an alternative fuel that reduces VOC, NOx, and/or PM10 emissions is advisable.*
- n. Use propane- or butane-powered on-site mobile equipment instead of gasoline. *Any equipment that utilizes an alternative fuel that reduces VOC, NOx, and/or PM10 emissions is advisable.*

OPERATION IMPACTS

- 4.10-8. The applicant of future subdivisions shall implement all rules and regulations adopted by the Governing Board of the SCAQMD which are applicable to the development of the subdivision (such as Rule 402 - Nuisance, Rule 1102 - Petroleum Solvent Dry Cleaners, Rule 1111 - NOx Emissions from Natural Gas-Fired, Fan-Type Central Furnaces, Rule 1146 - Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters) and which are in effect at the time of occupancy permit issuance.
- 4.10-9. Prior to the approval of each future subdivision proposed in association with the Newhall Ranch Specific Plan, each of the operational emission reduction measures indicated below (and in Tables 11-6 and 11-7 of the SCAQMD's CEQA *Air Quality Handbook*, as amended) shall be implemented if found applicable and feasible for that subdivision.

ON-ROAD MOBILE SOURCE OPERATIONAL EMISSIONS:

RESIDENTIAL USES

- a. Include satellite telecommunications centers in residential subdivisions. *Mitigation not suitable for River Village because satellite telecommunications centers have been superseded by other technology.*
- b. Establish a shuttle service from residential subdivisions to commercial core areas. *Mitigation not suitable for River Village because residential uses are in close proximity and within walking distance to commercial uses proposed within River Village.*
- c. Construct on-site or off-site bus stops (e.g., bus turnouts, passenger benches, and shelters).

⁷ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

⁸ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

⁹ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-14.

¹⁰ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-14.

- d. Construct off-site pedestrian facility improvements, such as overpasses and wider sidewalks. *Mitigation not suitable for River Village because no uses adjacent to the River Village site exist within Newhall Ranch to which pedestrian access would be warranted.*
- e. Include retail services within or adjacent to residential subdivisions. *The proposed project is in conformance with this measure.*
- f. Provide shuttles to major rail transit centers or multi-modal stations.
- g. Contribute to regional transit systems (e.g., right-of-way, capital improvements, etc.). *This measure does not directly contribute to reduced air emissions, emission reductions have not been quantified by SCAQMD,¹¹ and it is not given emissions reduction credit in the impact analysis.*
- h. Synchronize traffic lights on streets impacted by development.
- i. Construct, contribute, or dedicate land for the provision of off-site bicycle trails linking the facility to designated bicycle commuting routes.

COMMERCIAL USES

- j. Provide preferential parking spaces for carpools and vanpools and provide 7'2" minimum vertical clearance in parking facilities for vanpool access.
- k. Implement on-site circulation plans in parking lots to reduce vehicle queuing. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.¹²*
- l. Improve traffic flow at drive-thru's by designing separate windows for different functions and by providing temporary parking for orders not immediately available for pickup. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.¹³*
- m. Provide video-conference facilities. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.¹⁴*
- n. Set up resident worker training programs to improve job/housing balance. *Mitigation not suitable for River Village because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site. Furthermore, the effectiveness of this measure to reduce air emissions in the basin lies in actually achieving jobs/housing balance. The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.¹⁵*
- o. Implement home dispatching system where employees receive routing schedule by phone instead of driving to work. *Mitigation not suitable for River Village because it is outside the purview of the project applicant/developer to set up such a system. Such systems are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.*
- p. Develop a program to minimize the use of fleet vehicles during smog alerts (for business not subject to Regulation XV (now Rule 2202) or XII). *Mitigation not suitable for River Village because no commercial retail or office use on the site is expected to use fleet vehicles.*
- q. Use low-emissions fleet vehicles:
 - TLEV
 - ULEV
 - LEV
 - ZEV*Mitigation not suitable for River Village because no commercial retail or office use on the site is expected to use fleet vehicles.*
- r. Reduce employee parking spaces for those businesses subject to Regulation XV (now Rule 2202). *Rule 2202 applies to any employer who employs 250 or more employees on a full or part-time basis at a work site for a consecutive six-month period. It is conceivable that an office use employing as*

¹¹ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-18.

¹² South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

¹³ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-19.

¹⁴ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-19.

¹⁵ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-19.

many as 250 people can locate on the site; therefore, this mitigation measure applies to the River Village project. The requirement to achieve a specific AVR has been ruled unlawful by the federal government and is no longer recommended.¹⁶

- s. Implement a lunch shuttle service from a work site(s) to food establishments. Mitigation not suitable for River Village because Lots within River Village designated for mixed use commercial are expected to have food establishments located within walking distance, thereby not necessitating lunch shuttle service.
- t. Implement compressed work-week schedules where weekly work hours are compressed into fewer than five days.
 - 9/80
 - 4/40
 - 3/36

Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.

- u. Develop a trip reduction plan to achieve 1.5 AVR for businesses with less than 100 employees or multi-tenant work sites. Mitigation not suitable for River Village because SCAQMD Rule 2202 applies to all employers who meet certain criteria for implementing trip reduction measures. The requirement to achieve a specific AVR has been ruled unlawful by the federal government and is no longer recommended.
- v. Utilize satellite offices rather than regular work site to reduce VMT. Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.
- w. Establish a home-based telecommuting program. Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.
- x. Provide on-site child care and after-school facilities or contribute to off-site development within walking distance. Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.
- y. Require retail facilities or special event centers to offer travel incentives such as discounts on purchases for transit riders. Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site. Such a program to reduce air emissions in the Basin is not quantified by the SCAQMD and it is not given emission reduction credit in this impact analysis.¹⁷
- z. Provide on-site employee services such as cafeterias, banks, etc.
- aa. Establish a shuttle service from residential core areas to the work site. Mitigation not suitable for River Village because residential uses are proposed in close proximity and within walking distance to commercial uses proposed within River Village.
- ab. Construct on-site or off-site bus stops (e.g., bus turnouts, passenger benches, and shelters).
- ac. Implement a pricing structure for single-occupancy employee parking and/or provide discounts to ridesharers.
- ad. Include residential units within a commercial project.
- ae. Utilize parking in excess of code requirements as on-site park-n-ride lots or contribute to construction of off-site lots.

¹⁶ In 1988, the SCAQMD instituted Regulation XV that required enterprises with 100 or more employees to adopt trip reduction programs. The regulation required each employer to institute a trip reduction program that would achieve an Average Vehicle Ridership (AVR) of 1.75 in Downtown Los Angeles, 1.5 in the remainder of urbanized areas, and 1.3 in rural parts of the District. AVR measures the extent to which commuters use public transit, car pooling, and other multiple-occupant-vehicle modes of transportation. Regulation XV was repealed in December, 1995 and was replaced with Rule 2202 which provides options for employers to either continue trip reduction programs or reduce mobile source emissions through other strategies. As of January 1, 1997 Rule 2202 applies only to enterprises with 250 or more employees.

¹⁷ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-20.

- af. Any two of the following:
 - Construct off-site bicycle facility improvements, such as bicycle trails linking the facility to designated bicycle commuting routes, or on-site improvements, such as bicycle paths.
 - Include bicycle parking facilities, such as bicycle lockers and racks.
 - Include showers for bicycling employees' use.
- ag. Any two of the following:
 - Construct off-site pedestrian facility improvements, such as overpasses, wider sidewalks.
 - Construct on-site pedestrian facility improvements, such as building access which is physically separated from street and parking lot traffic and walk paths.
 - Include showers for pedestrian employees' use.
- ah. Provide shuttles to major rail transit stations and multi-modal centers.
- ai. Contribute to regional transit systems (e.g., right-of-way, capital improvements, etc.) . *This measure does not directly contribute to reduced air emissions, emission reductions have not been quantified,¹⁸ and it is not given emissions reduction credit in the impact analysis.¹⁹*
- aj. Charge visitors to park. *Mitigation not suitable for River Village because charging visitors to park at retail establishments would discourage patronage. Charging visitors to park at the office uses would encourage patrons to park in retail parking spaces or on the street. Charging visitors to pay for parking at the park site would encourage on-street parking.*
- ak. Synchronize traffic lights on streets impacted by development.
- al. Reschedule truck deliveries and pickups to off-peak hours. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.²⁰*
- am. Set up paid parking systems where drivers pay at walkup kiosk and exit via a stamped ticket to reduce emissions from queuing vehicles. *Mitigation not suitable for River Village because charging visitors to park at retail establishments would discourage patronage. Charging visitors to park at the office uses would encourage patrons to park in retail parking spaces or on the street. Charging visitors to pay for parking at the park site would encourage on-street parking. The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.²¹*
- an. Require on-site truck loading zones. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.²²*
- ao. Implement or contribute to public outreach programs. *Mitigation not suitable for the River Village applicant/developer because it is unclear as to what type of outreach program this mitigation measure refers. Furthermore, it is outside the purview of the project applicant/developer to set up such programs. Such programs are more appropriately set up and maintained by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site. Furthermore, the effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.²³*
- ap. Require employers not subject to Regulation XV (now Rule 2202) to provide commuter information area.

BUSINESS PARK USES

No Business Park uses are proposed within the River Village project.

- aq. Provide preferential parking spaces for carpools and vanpools and provide 7'2" minimum vertical clearance in parking facilities for vanpool access.
- ar. Implement on-site circulation plans in parking lots to reduce vehicle queuing.
- as. Set up resident worker training programs to improve job/housing balance.

¹⁸ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-18.

¹⁹ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

²⁰ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

²¹ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

²² South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

²³ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

- bx. Use energy-efficient low-sodium parking lot lights.

COMMERCIAL USES

- by. Use lighting controls and energy-efficient lighting.
- bz. Use fuel cells in residential subdivisions to produce heat and electricity.
- ca. Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting).
- cb. Use light-colored roofing materials to reflect heat.
- cc. Increase walls and attic insulation beyond Title 24 requirements.
- cd. Use solar or low emission water heaters.
- ce. Use central water heating systems.
- cf. Provide shade trees to reduce building heating/cooling needs.
- cg. Use energy-efficient and automated controls for air conditioners.
- ch. Use double-paned windows.
- ci. Use energy-efficient low-sodium parking lot lights.
- cj. Use lighting controls and energy-efficient lighting.
- ck. Use light-colored roofing materials to reflect heat.
- cl. Increase walls and attic insulation beyond Title 24 requirements.
- cm. Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting).

BUSINESS PARK USES

No Business Park uses are proposed within the River Village project.

- cn. Provide shade trees to reduce building heating/cooling needs.
- co. Use energy-efficient and automated controls for air conditioning.
- cp. Use double-paned windows.
- cq. Use energy-efficient low-sodium parking lot lights.
- cr. Use lighting controls and energy-efficient lighting.
- cs. Use light-colored roofing materials to reflect heat.
- ct. Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting).
- cu. Increase walls and attic insulation beyond Title 24 requirements.
- cv. Improved storage and handling of source materials.
- cw. Materials substitution (e.g., use water-based paints, life-cycle analysis).
- cx. Modify manufacturing processes (e.g., reduce process stages, closed-loop systems, materials recycling).
- cy. Resource recovery systems that redirect chemicals to new production processes.

- 4.10-10. All non-residential development of 25,000 gross square feet or more shall comply with the County's Transportation Demand Management (TDM) Ordinance (Ordinance No. 93-0028M) in effect at the time of subdivision. The sizes and configurations of the Specific Plan's non-residential uses are not known at this time and the Ordinance specifies different requirements based on the size of the project under review. All current provisions of the ordinance are summarized in Appendix 4.10.
- 4.10-11. Subdivisions and buildings shall comply with Title 24 of the California Code of Regulations which are current at the time of development.
- 4.10-12. Lighting for public streets, parking areas, and recreation areas shall utilize energy efficient light and mechanical, computerized or photo cell switching devices to reduce unnecessary energy usage.
- 4.10-13. Any on-site subterranean parking structures shall provide adequate ventilation systems to disperse pollutants and preclude the potential for a pollutant concentration to occur. *Mitigation not suitable for River Village because no subterranean parking structures are proposed within the project. Furthermore, this measure reduces indoor air pollutants, but does not effectively reduce air emissions within the Basin.*

- 4.10-14. The sellers of new residential units shall be required to distribute brochures and other relevant information published by the SCAQMD or similar organization to new homeowners regarding the importance of reducing vehicle miles traveled and related air quality impacts, as well as on local opportunities for public transit and ridesharing.

UNMITIGATED CONSTRUCTION EMISSIONS

Project Name River Village Unmitigated Emissions
 Subphase Weeks 1 thru 19
 Length of Subphase (weeks) 19.00
 Year 2006
 Total Acreage 120.28

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	130.69	182.74	18.98	1.69	19,407.42	Fugitive Dust Rule 403
On-Road Diesel Exhaust	130.69	182.74	18.98	1.69	19,407.42	
Off-Road Diesel Exhaust	130.69	182.74	18.98	1.69	19,407.42	
Worker Commute Trips	130.69	182.74	18.98	1.69	19,407.42	
Mitigation/Reduction	130.69	182.74	18.98	1.69	19,407.42	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	1,987.28	410.56	1,543.43	1.72	9,772.76	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 20 thru 39
 Length of Subphase (weeks) 20.00
 Year 2006
 Total Acreage 126.61

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	130.69	182.74	18.98	1.69	19,393.70	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	—	65.65		
Off-Road Diesel Exhaust	15.38	1.71	2.90	0.02	0.31		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	1,332.30	167.28	1,176.24	—	46.72	Fugitive Dust Rule 403	
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11		
On-Road Diesel Exhaust Emissions	23.98	2.36	12.29	0.14	0.28		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Architectural Painting							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	Yes		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 40 thru 46
 Length of Subphase (weeks) 7.00
 Year 2006
 Total Acreage 44.31

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	130.69	182.74	18.98	1.69	19,407.43	Fugitive Dust Rule 403
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	0.02	65.65	
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	0.11	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	Fugitive Dust Rule 403
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	12.27	1.35	2.28	0.02	0.09	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	1,682.38	227.74	1,654.08	0.04	72.90	Fugitive Dust Rule 403
Off-Road Diesel Exhaust	25.51	2.80	4.75	0.04	0.18	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	151.01	18.98	1,521.55	0.02	65.65	
Off-Gas Emissions	25.51	2.80	4.75	0.04	0.18	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	5,089.89	960.19	4,341.75	1.86	9,892.94	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 47 thru 91
 Length of Subphase (weeks) 45.00
 Year 2006
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	-	-	-	-	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	-	-	-	-	-	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	-	-	-	-	21.98	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	-	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	-	-	-	-	-	
Fugitive Dust	-	-	-	-	10.99	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	-	1.01	-	-	-	
Off-Road Diesel Exhaust Emissions	1,382.30	167.28	1,126.24	-	46.72	
On-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
Worker Commute Emissions	12.27	1.35	2.28	0.02	0.09	
Mitigation/Reduction	-	-	-	-	-	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	222.74	1,634.08	-	72.90	
Worker Commute Trips	25.31	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions	-	151.01	-	-	-	
Worker Commute Trips	25.31	2.80	4.75	0.04	0.18	
Mitigation/Reduction	-	-	-	-	-	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	3,102.61	549.63	2,798.32	0.15	131.16	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Week 92
 Length of Subphase (weeks) 1.00
 Year 2007
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	1,379.05	1.01	1,082.87	0.01	31.93		
Off-Road Diesel Exhaust Emissions	4.03	0.61	5.89	0.01	0.10		
On-Road Diesel Exhaust Emissions	11.29	1.25	2.11	0.01	0.08		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	2,159.16	275.61	1,931.00	0.02	79.99		
Worker Commute Trips	28.13	3.11	5.26	0.02	0.21		
Architectural Painting							
Off-Gas Emissions	151.50	1.01	1,082.87	0.01	31.93		
Worker Commute Trips	28.13	3.11	5.26	0.02	0.21		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	3,603.81	603.46	3,035.29	0.06	122.52		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 93 thru 144
 Length of Subphase (weeks) 52.00
 Year 2007
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	--	--	--	--	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	--	--	--	--	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	--	0.02	--	--	--	
Off-Road Diesel Exhaust Emissions	1,373.05	167.28	1,885.87	--	41.93	
On-Road Diesel Exhaust Emissions	0.08	0.01	0.11	0.00	0.00	
Worker Commute Emissions	11.29	1.25	2.11	0.01	0.08	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,872.07	240.07	1,693.53	--	70.48	
Worker Commute Trips	24.90	2.75	4.63	0.02	0.18	
Architectural Painting						
Off-Gas Emissions	--	141.73	--	--	--	
Worker Commute Trips	24.90	2.75	4.63	0.02	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	3,306.30	555.86	2,790.95	0.05	112.86	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 145 thru 158
 Length of Subphase (weeks) 14.00
 Year 2008
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Paving and Asphalt Subphase							
Paving Off-Gas Emissions	1,385.56	167.28	1,058.33	38.46	0.10		
Off-Road Diesel Exhaust Emissions	3.70	0.57	5.39	0.01	0.08		
On-Road Diesel Exhaust Emissions	10.38	1.15	1.93	0.01	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,685.60	212.51	1,433.80	58.55	0.17		
Worker Commute Trips	20.77	2.30	3.89	0.02	0.12		
Architectural Painting							
Off-Gas Emissions	141.66	1.15	1.93	0.01	0.00		
Worker Commute Trips	20.77	2.30	3.89	0.02	0.12		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	3,126.78	528.79	2,527.25	0.05	97.52		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 159 thru 178
 Length of Subphase (weeks) 21.00
 Year 2009
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Paving and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Building Construction and Architectural Coatings Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,726.62	212.51	1,394.94	0.03	53.47		
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17		
Architectural Painting							
Off-Gas Emissions	141.56	17.19	137.25	0.01	4.54		
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	1,764.79	231.73	1,402.06	0.03	53.80		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 179 thru 196
 Length of Subphase (weeks) 18.00
 Year 2009
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,515.09	187.20	1,239.14	0.03	48.23	
Worker Commute Trips	17.12	1.91	3.21	0.02	0.15	
Architectural Painting						
Off-Gas Emissions	141.24	1.91	3.21	0.02	0.15	
Worker Commute Trips	17.12	1.91	3.21	0.02	0.15	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	1,549.32	332.26	1,245.55	0.03	48.53	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 197 thru 210
 Length of Subphase (weeks) 13.00
 Year 2009
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Paving and Asphalt During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Paving and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Paving and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,041.33	128.61	880.48	0.02	33.06	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Architectural Painting						
Off-Gas Emissions	0.00	87.64	0.00	0.00	0.00	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	1,064.36	218.82	884.79	0.02	33.26	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 211 thru 220
 Length of Subphase (weeks) 10.00
 Year 2010
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	779.57	95.89	596.66	0.01	21.89	
Worker Commute Trips	7.50	0.64	1.39	0.01	0.07	
Architectural Painting						
Off-Gas Emissions	779.57	95.89	596.66	0.01	21.89	
Worker Commute Trips	7.50	0.64	1.39	0.01	0.07	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	794.57	134.83	596.44	0.01	22.03	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 221 thru 235
 Length of Subphase (weeks) 15.00
 Year 2010
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	491.65	59.17	372.96	0.00	13.54		
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04		
Architectural Painting							
Off-Gas Emissions	0.00	11.78	0.00	0.00	0.00		
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	500.54	71.95	374.61	0.01	13.72		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	No	No	Yes	No	No		

River Village Office Construction Only Unmitigated Emissions

Weeks of Construction: 140

Year Constr. Begins: 2015

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Grading Subphase							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	894.12	106.21	663.11	-	23.88		
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08		
Architectural Painting							
Off-Gas Emissions	-	38.48	-	-	-		
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	905.93	147.09	669.17	0.03	24.03		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

MITIGATED CONSTRUCTION EMISSIONS

Project Name River Village Mitigated Emissions
 Subphase Weeks 1 thru 19
 Length of Subphase (weeks) 19.00
 Year 2006

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	130.69	182.74	18.98	1.69	19,407.42	Water Exposed Surfaces Three Times Daily Assumes Use of Aqueous Fuel, Cooled Exhaust Gas Recirculation Assumes Use of Aqueous Fuel, Cooled Exhaust Gas Recirculation No Feasible Mitigation Available
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	0.02	3.30	
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	65.65	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.11	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	1.69	9,703.71	
On-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	2.64	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	97.16	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	330.37	207.06	721.79	0.02	9,672.96	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
Subphase Weeks 20 thru 39
Length of Subphase (weeks) 20.00
Year 2006

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	150.69	182.74	18.98	1.69	19,393.79	Water Exposed Surfaces Three Times Daily Aqueous Fuel, Cooled Exhaust Gas Recirculation Aqueous Fuel, Cooled Exhaust Gas Recirculation No Feasible Mitigation Available
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	1.69	3.30	
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	0.11	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	1.69	9,696.85	
On-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	2.64	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	97.16	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	None Available Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Feasible Mitigation Available
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	23.98	2.96	12.29	0.11	0.28	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	4.00	0.58	3.35	0.06	0.09	
On-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	490.05	227.72	1,255.02	0.13	9,643.99	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
Subphase Weeks 40 thru 46
Length of Subphase (weeks) 7.00
Year 2006

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	130.69	182.74	18.98	1.69	19,402.42	Water Exposed Surfaces Three Times Daily Aqueous Fuel, Cooled Exhaust Gas Recirculation Aqueous Fuel, Cooled Exhaust Gas Recirculation No Feasible Mitigation Available
On-Road Diesel Exhaust	1,841.61	226.11	1,521.53	1.69	3.30	
Off-Road Diesel Exhaust	15.38	1.71	2.90	0.02	0.11	
Worker Commute Trips						
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	1.69	9,703.71	
On-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	2.64	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	97.16	
Worker Commute Trips					0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	None Available Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Feasible Mitigation Available
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	12.27	1.35	2.28	0.02	0.09	
Worker Commute Emissions						
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	4.00	0.38	3.35	0.06	0.09	
Off-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Off-Road Diesel Exhaust	1,682.38	222.74	1,654.08	0.00	72.90	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions		151.03				
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,514.14	200.47	893.20	0.00	107.89	
Off-Gas Emissions		n/a				
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	697.89	405.10	2,015.39	0.11	9,616.01	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
 Subphase Weeks 47 thru 91
 Length of Subphase (weeks) 45.00
 Year 2006

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	--	--	--	--	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
Fugitive Dust	--	--	--	--	21.98	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	10.99	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	--	1.01	--	--	--	
Off-Road Diesel Exhaust Emissions	1,332.50	167.28	1,126.24	--	46.72	
On-Road Diesel Exhaust Emissions	4.49	0.65	6.23	0.06	0.13	
Worker Commute Emissions	12.27	1.35	2.28	0.02	0.09	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	None Available
On-Road Diesel Exhaust	4.00	0.58	3.35	0.06	0.09	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	222.74	1,654.08	--	72.90	
Worker Commute Trips	25.51	2.90	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions	--	151.01	--	--	--	
Worker Commute Trips	25.51	2.90	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,514.14	200.47	893.20	0.00	107.89	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	367.22	198.03	1,293.59	0.09	-45.97	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	No Feasible Mitigation Available

Project Name River Village Mitigated Emissions
Subphase Week 92
Length of Subphase (weeks) 1.00
Year 2007

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,373.05	167.28	1,085.87	41.93	41.93	
Off-Road Diesel Exhaust Emissions	4.05	0.61	5.80	0.01	0.10	
On-Road Diesel Exhaust Emissions	11.29	1.25	2.11	0.01	0.08	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	3.63	0.54	3.13	0.01	0.08	None Available
On-Road Diesel Exhaust	1,235.75	150.55	586.37	n/a	62.06	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction	2,159.16	275.61	1,931.00	79.99	79.99	
Off-Road Diesel Exhaust	28.13	3.11	5.26	0.02	0.21	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	28.13	3.11	5.26	0.02	0.21	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	1,943.24	248.05	1,642.74	0.00	118.39	
Off-Gas Emissions	n/a	n/a	n/a	n/a	n/a	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	421.17	204.32	1,403.05	0.05	-58.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
SCAQMD Threshold:	850.00	75.00	100.00	150.00	150.00	No Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	No Feasible Mitigation Available

Project Name River Village Mitigated Emissions
Subphase Weeks 93 thru 144
Length of Subphase (weeks) 52.00
Year 2007

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,373.05	167.28	1,085.87	41.94		None Available
Off-Road Diesel Exhaust Emissions	0.08	0.01	0.11	0.00	0.00	
On-Road Diesel Exhaust Emissions	11.29	1.25	2.41	0.01	0.08	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.07	0.01	0.06	0.00	0.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
On-Road Diesel Exhaust	1,235.75	150.55	586.37	n/a	62.06	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Worker Commute Trips						
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,872.07	240.07	1,693.33	70.48		
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18	
Architectural Painting						
Off-Gas Emissions	141.73					
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18	No Mitigation Available
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,684.86	216.06	914.52	0.00	104.31	
Off-Gas Emissions	n/a					
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	385.62	189.23	1,290.00	0.05	-53.50	No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	190.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
 Subphase Weeks 145 thru 158
 Length of Subphase (weeks) 14.00
 Year 2008

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,385.56	167.28	1,058.35	0.01	38.46	None Available
Off-Road Diesel Exhaust Emissions	3.70	0.57	5.39	0.01	0.10	
On-Road Diesel Exhaust Emissions	10.38	1.15	1.94	0.01	0.08	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	3.33	0.51	2.91	0.01	0.08	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,247.00	150.55	571.51	n/a	56.92	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,685.60	212.51	1,453.90	0.02	58.55	
Worker Commute Trips	20.77	2.30	3.89	0.02	0.17	
Architectural Painting						
Off-Gas Emissions	0.00	141.66	0.00	0.00	0.00	
Worker Commute Trips	20.77	2.30	3.89	0.02	0.17	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,517.04	191.26	785.05	0.00	86.65	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	No Mitigation Available
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Net Emission Totals:	359.40	186.46	1,167.78	0.04	-46.13	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 159 thru 178
Length of Subphase (weeks) 21.00
Year 2009

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,726.62	212.31	1,394.91	0.00	53.47	
Worker Commute Trips	19.09	2.13	3.38	0.02	0.17	
Architectural Painting						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	19.09	2.13	3.38	0.02	0.17	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,553.96	191.26	753.25	0.00	79.14	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	210.84	167.17	648.81	0.03	-25.33	No Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Feasible Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 179 thru 196
Length of Subphase (weeks) 18.00
Year 2009

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	1,515.09	187.20	1,239.14	0.02	48.23	
Off-Road Diesel Exhaust	17.12	1.91	3.21	0.02	0.15	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	17.12	1.91	3.21	0.02	0.15	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	1,363.58	168.48	669.14	0.00	71.38	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	185.74	163.78	576.42	0.03	-22.85	No Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Feasible Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 197 thru 210
Length of Subphase (weeks) 13.00
Year 2009

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust					0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	--	--	--	--	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions		0.00		--	--	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	--	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Architectural Painting						
Off-Gas Emissions	--	67.64	--	--	--	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	23.03	90.21	4.31	0.02	0.20	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	No	No	No	

Project Name River Village Mitigated Emissions
 Subphase Weeks 211 thru 220
 Length of Subphase (weeks) 10.00
 Year 2010

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	15.00	40.94	2.78	0.01	0.14	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	No	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 221 thru 235
Length of Subphase (weeks) 15.00
Year 2010

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	491.65	59.17	372.96	0.00	13.64	
Off-Road Diesel Exhaust	4.44	0.50	0.82	0.00	0.04	
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04	
Architectural Painting	4.44	0.50	0.82	0.00	0.04	
Off-Gas Emissions	4.44	0.50	0.82	0.00	0.04	
Off-Gas Emissions	442.49	53.25	201.40	0.00	20.19	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	0.00	n/a	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	58.05	18.70	173.21	0.01	-6.46	No Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	Yes	No	No	No Feasible Mitigation Available

River Village Office Construction Only Mitigated Emissions

Weeks of Construction: 140

Year Constr. Begins: 2015

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Off-Road Diesel Exhaust	884.12	106.21	665.11	--	23.88	
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08	
Architectural Painting						
Off-Gas Emissions	--	38.48	--	--	--	
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08	
Mitigation/Reduction						
Off-Road Diesel Exhaust	795.71	95.59	359.16	0.00	35.34	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	110.22	51.50	316.01	0.03	-11.31	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	Yes	No	No	

URBEMIS2002
UNMITIGATED OPERATIONAL EMISSIONS
SUMMERTIME

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	78.83	31.65	21.52	0.17	0.08
TOTALS (lbs/day, mitigated)	77.29	26.13	10.61	0.00	0.05

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	342.42	391.84	4,155.89	2.47	377.33
TOTALS (lbs/day, mitigated)	342.41	391.82	4,155.68	2.47	377.31

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	421.25	423.49	4,177.40	2.65	377.40
TOTALS (lbs/day, mitigated)	419.69	417.94	4,166.29	2.47	377.36

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	2.40	31.52	13.20	-	0.06
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.97	0.13	8.32	0.17	0.02
Consumer Prdcts	75.46	-	-	-	-
TOTALS (lbs/day, unmitigated)	78.83	31.65	21.52	0.17	0.08

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	56.31	60.90	669.83	0.39	59.43
Apartments low rise	32.54	32.68	359.42	0.21	31.89
Condo/townhouse general	31.93	33.14	364.51	0.21	32.34
Elementary school	20.51	10.98	116.55	0.07	10.66
City park	0.71	0.49	5.16	0.00	0.47
Commercial Center 10-30 ac	91.46	120.96	1,259.13	0.76	115.66
Commercial Center <10 ac.	42.72	57.47	598.28	0.36	54.96
Commercial Shops	2.41	3.13	32.54	0.02	2.99
Commercial Office	63.82	72.09	750.48	0.45	68.94
TOTAL EMISSIONS (lbs/day)	342.42	391.84	4,155.89	2.47	377.33

Does not include correction for passby trips.
Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.90 trips / dwelling units	591.00	5,850.90
Apartments low rise	6.90 trips / dwelling units	455.00	3,139.50
Condo/townhouse general	8.00 trips / dwelling units	398.00	3,184.00
Elementary school	1.45 trips / students	750.00	1,087.50
City park	2.60 trips / acres	20.90	54.34
Commercial Center 10-30 ac	54.06 trips / 1000 sq. ft.	252.00	13,623.12
Commercial Center <10 ac.	85.06 trips / 1000 sq. ft.	76.10	6,473.07
Commercial Shops	37.06 trips / 1000 sq. ft.	9.50	352.07
Commercial Office	11.56 trips / 1000 sq. ft.	702.40	8,119.74

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
City park				5.0	2.5	92.5
Commercial Center 10-30 ac.				2.0	1.0	97.0
Commercial Center <10 ac.				2.0	1.0	97.0
Commercial Shops				2.0	1.0	97.0
Commercial Office				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The area source mitigation measure option switch changed from off to on.
The natural gas residential percentage changed from 60 to 100.
The percentage of wood stoves changed from 35 to 0.
The landscape length of the summer period (in days) changed from 180 to 365.
The landscape year changed from 2004 to 2007.
The consumer product persons per residential unit changed from 2.861 to 3.056.
Mitigation measure Orient Buildings North/South: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Rsdntl Lndscp Maint.
has been changed from off to on.
Mitigation measure Central Water Heater: Cmrc1 Space Heat.
has been changed from off to on.
Mitigation measure Orient Buildings North/South: Cmrc1 Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Cmrc1 Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Cmrc1 Lndscp Maint.
has been changed from off to on.

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2007.
The double counting internal work trip limit changed from to 791.577.
The double counting shopping trip limit changed from to 395.7885.
The double counting other trip limit changed from to 5234.992.
The travel mode environment settings changed from both to: both
Mitigation measure Mixed Use Project (Residential Oriented):3
has been changed from off to on.
Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1
has been changed from off to on.
Mitigation measure Provide Direct Pedestrian Connections:1
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety:0.5
has been changed from off to on.
Mitigation measure Provide Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Signalization and Signage:0.5
has been changed from off to on.
Mitigation measure Mixed Use Project (Commercial Oriented):1
has been changed from off to on.
Mitigation measure Floor Area Ratio 0.75 or Greater:1
has been changed from off to on.
Mitigation measure Provide Wide Sidewalks and Onsite Pedestrian Facilities:1
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Project Provides Shade Trees to Shade Sidewalks:0.5
has been changed from off to on.
Mitigation measure Project Provides Street Art and/or Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety Designs/Infrastructure at Crossings:0.5
has been changed from off to on.
Mitigation measure Articulated Storefront(s) Display Windows with Visual Interest:0.25
has been changed from off to on.
Mitigation measure No Long Uninterrupted Walls Along Pedestrian Walkways:0.25
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Secure Bicycle Parking:1
has been changed from off to on.
Mitigation measure Provide Employee Lockers and Showers:1
has been changed from off to on.
Mitigation measure Shuttle Bus Service to Transit/Multi-Modal Center:2
has been changed from off to on.
Mitigation measure Preferential Carpool/Vanpool Parking:1.5
has been changed from off to on.
Mitigation measure Many Frequently Needed Services Provided:5

has been changed from off to on.
Mitigation measuremitop5: Park and Ride Lots
has been changed from on to off.

URBEMIS2002
UNMITIGATED OPERATIONAL EMISSIONS
WINTERTIME

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	1,695.26	49.89	1,797.29	2.83	244.44
TOTALS (lbs/day, mitigated)	1,694.70	44.49	1,794.71	2.83	244.43

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	330.01	566.89	4,005.67	2.01	377.33
TOTALS (lbs/day, mitigated)	330.00	566.86	4,005.48	2.01	377.31

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	2,025.28	616.78	5,802.96	4.83	621.77
TOTALS (lbs/day, mitigated)	2,024.69	611.36	5,800.19	4.83	621.74

URBEMIS 2002 For Windows 7.5.0

ile Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 roject Name: River Village Operational Emissions
 roject Location: South Coast Air Basin (Los Angeles area)
 n-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Winter)

REA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	2.40	31.52	13.20	-	0.06
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	1,617.41	18.36	1,784.09	2.83	244.38
Landscaping - No winter emissions					
Consumer Prdcts	75.46	-	-	-	-
TOTALS(lbs/day,unmitigated)	1,695.26	49.89	1,797.29	2.83	244.44

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	52.80	88.27	633.57	0.32	59.43
Apartments low rise	28.40	47.36	339.97	0.17	31.89
Condo/townhouse general	28.77	48.03	344.78	0.18	32.34
Elementary school	9.34	15.91	110.82	0.06	10.66
City park	0.42	0.71	5.00	0.00	0.47
Commercial Center 10-30 ac	100.15	174.82	1,226.28	0.61	115.66
Commercial Center <10 ac.	47.56	83.07	582.67	0.29	54.96
Commercial Shops	2.59	4.52	31.69	0.02	2.99
Commercial Office	59.98	104.20	730.89	0.36	68.94
TOTAL EMISSIONS (lbs/day)	330.01	566.89	4,005.67	2.01	377.33

Does not include correction for passby trips.

Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.90 trips / dwelling units	591.00	5,850.90
Apartments low rise	6.90 trips / dwelling units	455.00	3,139.50
Condo/townhouse general	8.00 trips / dwelling units	398.00	3,184.00
Elementary school	1.45 trips / students	750.00	1,087.50
City park	2.60 trips / acres	20.90	54.34
Commercial Center 10-30 ac	54.06 trips / 1000 sq. ft.	252.00	13,623.12
Commercial Center <10 ac.	85.06 trips / 1000 sq. ft.	76.10	6,473.07
Commercial Shops	37.06 trips / 1000 sq. ft.	9.50	352.07
Commercial Office	11.56 trips / 1000 sq. ft.	702.40	8,119.74

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
City park				5.0	2.5	92.5
Commercial Center 10-30 ac.				2.0	1.0	97.0
Commercial Center <10 ac.				2.0	1.0	97.0
Commercial Shops				2.0	1.0	97.0
Commercial Office				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The area source mitigation measure option switch changed from off to on.
The natural gas residential percentage changed from 60 to 100.
The percentage of wood stoves changed from 35 to 0.
The landscape length of the summer period (in days) changed from 180 to 365.
The landscape year changed from 2004 to 2007.
The consumer product persons per residential unit changed from 2.861 to 3.056.
Mitigation measure Orient Buildings North/South: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Rsdntl Lndscp Maint.
has been changed from off to on.
Mitigation measure Central Water Heater: Cmrcl Space Heat.
has been changed from off to on.
Mitigation measure Orient Buildings North/South: Cmrcl Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Cmrcl Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Cmrcl Lndscp Maint.
has been changed from off to on.

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2007.
The double counting internal work trip limit changed from to 791.577.
The double counting shopping trip limit changed from to 395.7885.
The double counting other trip limit changed from to 5234.992.
The travel mode environment settings changed from both to: both
Mitigation measure Mixed Use Project (Residential Oriented):3
has been changed from off to on.
Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1
has been changed from off to on.
Mitigation measure Provide Direct Pedestrian Connections:1
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety:0.5
has been changed from off to on.
Mitigation measure Provide Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Signalization and Signage:0.5
has been changed from off to on.
Mitigation measure Mixed Use Project (Commercial Oriented):1
has been changed from off to on.
Mitigation measure Floor Area Ratio 0.75 or Greater:1
has been changed from off to on.
Mitigation measure Provide Wide Sidewalks and Onsite Pedestrian Facilities:1
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Project Provides Shade Trees to Shade Sidewalks:0.5
has been changed from off to on.
Mitigation measure Project Provides Street Art and/or Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety Designs/Infrastructure at Crossings:0.5
has been changed from off to on.
Mitigation measure Articulated Storefront(s) Display Windows with Visual Interest:0.25
has been changed from off to on.
Mitigation measure No Long Uninterrupted Walls Along Pedestrian Walkways:0.25
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Secure Bicycle Parking:1
has been changed from off to on.
Mitigation measure Provide Employee Lockers and Showers:1
has been changed from off to on.
Mitigation measure Shuttle Bus Service to Transit/Multi-Modal Center:2
has been changed from off to on.
Mitigation measure Preferential Carpool/Vanpool Parking:1.5
has been changed from off to on.
Mitigation measure Many Frequently Needed Services Provided:5

age: 6

has been changed from off to on.

litigation measuremitop5: Park and Ride Lots

has been changed from on to off.

SUMMERTIME EMISSIONS REDUCTIONS

ESTIMATE SUMMERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Input Fields		Unmitigated Emissions in Pounds per Day			
LAND USE		CO	VOC	NO _x	PM ₁₀
Single Family Residential Uses	Vehicular Sources	669.49	56.25	66.94	56.43
	Area Sources	9.36	39.22	13.87	9.04
Multi-Family Residential Uses	Vehicular Sources	723.93	64.47	68.67	64.73
	Area Sources	7.36	38.82	9.21	6.03
Commercial/Office/Institutional Uses	Vehicular Sources	2,782.15	221.44	265.41	283.67
	Area Sources	4.80	0.80	9.79	6.92
Wood-Burning Fire Place Emissions	Vehicular Sources	0.93	0.00	0.00	0.00
	Area Sources	0.93	0.00	0.00	0.00
Total Emissions	Vehicular Sources	4,155.39	342.42	391.64	377.33
	Area Sources	21.52	78.84	31.64	0.09
Total Non-Reduced Emissions		4,177.41	421.26	423.48	377.42

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Stationary Sources											
All Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	10.0%	11.0%	9.5%	4.5%	1.74	8.58	2.08	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use built-in energy-efficient appliances	3.0%	2.5%	3.0%	6.5%	0.32	1.95	0.66	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	4.5%	4.5%	4.0%	2.5%	0.78	3.51	0.88	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use fuel cells in residential subdivisions to produce heat and elec.	1.0%	0.0%	1.5%	7.0%	0.17	0.00	0.33	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	13.5%	14.0%	13.0%	10.5%	2.35	10.93	2.85	0.01	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.5%	1.5%	1.5%	1.5%	0.26	1.17	0.33	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	13.0%	14.0%	13.0%	7.5%	2.26	10.93	2.85	0.01	
Multi-Family Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	8.5%	9.0%	8.0%	4.0%	0.00	0.00	0.00	0.00	Central heating systems are not desired by the average multi-family resident.
Commercial, Office, Institutional Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.5%	0.5%	0.5%	1.0%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	1.0%	1.0%	1.0%	1.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	3.0%	3.5%	3.0%	2.5%	0.12	0.03	0.25	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	7.0%	3.0%	8.5%	19.5%	0.29	0.02	0.82	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.0%	1.0%	1.0%	0.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	9.5%	10.0%	9.0%	7.0%	0.39	0.08	0.87	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	12.5%	11.0%	13.5%	17.5%	0.51	0.09	1.39	0.00	
Industrial Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	0.0%	0.0%	0.5%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.5%	0.0%	1.0%	2.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	2.5%	2.0%	3.0%	5.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	0.5%	0.0%	1.0%	3.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Improved storage and handling of source materials	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Materials substitution (e.g., use water-based paints, life cycle analysis)	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Utilize efficient manufacturing processes	1.5%	0.5%	2.0%	6.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Resource recovery systems	3.0%	3.5%	3.0%	1.5%	0.00	0.00	0.00	0.00	

ESTIMATED SUMMERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Mobile Sources											
Residential Uses											
	X	Allow satellite telecommunications centers in residential subdivisions	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Satellite telecommunications centers are superseded by other technology.
	X	Shuttle service from res. subdivisions to commercial core areas	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Residences are proposed in walking distance to proposed commercial areas.
X		Construct bus passenger benches and shelters	0.2%	0.2%	0.2%	0.2%	2.79	0.24	0.25	0.25	
X		Construct pedestrian facility improvements	0.1%	0.1%	0.1%	0.1%	1.39	0.12	0.13	0.12	
X		Re all services within or adjacent to residential subdivisions	1.3%	1.0%	1.3%	1.3%	18.12	1.21	1.65	1.61	
X		Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	1.39	0.12	0.13	0.12	
X		Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	55.75	4.83	5.07	4.95	
X		Construct bicycle trails	0.1%	0.1%	0.1%	0.1%	1.39	0.12	0.13	0.12	
Commercial, Office and Institutional Uses											
X		Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
X		Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Provide separate windows for fast-food restaurants	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Provide video-conference facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.30	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	No commercial retail or office use on site is expected to use fleet vehicles.
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	No commercial retail or office use on site is expected to use fleet vehicles.
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Lunch shuttle service from a worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	Mixed use lots are expected to have food establishments located within walking distance for employees.
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	The requirement to achieve a specific AVR has been ruled unlawful by the local government.
	X	Utilize satellite offices rather than regular worksite to reduce VMT	0.1%	0.1%	0.1%	0.1%	0.30	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Establish a home-based telecommuting program	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
X		Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
	X	Offer travel incentives such as discounts on purchases for transit riders	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
X		Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	8.29	0.44	0.80	0.76	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Residential uses are in close proximity and within walking distance to proposed commercial uses.
X		Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
X		Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
X		Residential units within or adjacent to commercial developments	4.0%	3.1%	4.0%	4.0%	10.49	6.87	10.60	10.15	
X		Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
X		Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	8.29	0.44	0.80	0.76	
X		Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	5.32	0.44	0.53	0.51	
X		Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
X		Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Charge visitors to park	2.0%	1.5%	2.0%	2.0%	56.24	3.32	5.30	5.07	
X		Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	10.49	8.87	10.60	10.15	
X		Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Paid parking at walkup kiosks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Provide commuter information areas	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	Such programs are set up by and at the discretion of future occupants of the commercial uses.

ESTIMATED SUMMERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Industrial Uses											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement house dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide commuter information areas	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	
	X	Offer loans or other incentives to employees who move locally	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.00	0.00	0.00	0.00	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	0.00	0.00	0.00	0.00	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Lunch shuttle system from worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install aerodynamic add-on devices to heavy-duty trucks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce ship cruising speeds in the inner harbor	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low-emission fuels or electrify airport ground service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Engine tuning for marine vessels	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce number of aircraft engines used during idling	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install monitoring system to control airport shuttles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use centralized ground power systems for airport service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
Reduction in Stationary Sources Emissions (Pounds per day)							-9.56	-37.32	-13.62	-0.04	
Reduction in Mobile Sources Emissions (Pounds per day)							-395.72	-28.36	-37.57	-36.09	
Total Reduction in Emissions Based on Newhall Ranch FEIR Measures (Pounds per day)							-405.28	-65.68	-51.19	-36.13	
Percentage Reduced Based on Newhall Ranch FEIR Measures							-9.70%	-15.59%	-12.09%	-9.57%	
No Wood Burning Fire Places or Stoves in Residential Units							0.00	0.00	0.00	0.00	
Total Percent Reduction Based on Implementation of All Recommended Measures							-9.70%	-15.59%	-12.09%	-9.57%	
Total Reduced Stationary Source Emissions							11.96	41.52	18.02	0.05	
Total Reduced Mobile Source Emissions							3,760.17	314.06	354.27	341.24	
TOTAL REDUCED EMISSIONS							3,772.13	355.58	372.29	341.29	
SCAQMD Thresholds							550.00	55.00	55.00	150.00	
Project Air Quality Impacts Significant?							YES	YES	YES	YES	

WINTERTIME EMISSIONS REDUCTIONS

ESTIMATED WINTERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Input Fields		Unmitigated Emissions in Pounds per Day			
LAND USE		CO	VOC	NO _x	PM ₁₀
Single Family Residential Uses	Vehicular Sources	683.87	52.80	88.27	29.43
	Area Sources	9.86	29.23	13.67	0.06
Multi-Family Residential Uses	Vehicular Sources	864.79	57.17	95.89	64.28
	Area Sources	7.56	34.82	8.27	0.02
Commercial/Office/Institutional Uses	Vehicular Sources	2,657.30	226.04	385.23	253.62
	Area Sources	1.18	0.83	9.70	0.02
Wood-Burning Fire Place Emissions	Vehicular Sources	0.00	0.00	0.00	0.00
	Area Sources	1,764.09	1,617.41	15.56	244.38
Total Emissions	Vehicular Sources	4,005.67	330.01	566.89	377.33
	Area Sources	1,805.61	1,696.25	50.00	244.47
Total Non-Reduced Emissions		5,811.28	2,026.26	616.89	621.80

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Stationary Sources											
All Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	10.0%	11.0%	9.5%	4.5%	1.74	8.58	2.08	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use built-in energy-efficient appliances	3.0%	2.5%	3.0%	6.5%	0.52	1.95	0.66	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	4.5%	4.5%	4.0%	2.5%	0.78	3.51	0.88	0.00	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use fuel cells in residential subdivisions to produce heat and elec.	1.0%	0.0%	1.5%	7.0%	0.17	0.00	0.33	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	13.5%	14.0%	13.0%	10.5%	2.35	10.93	2.85	0.01	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.5%	1.5%	1.5%	1.5%	0.26	1.17	0.33	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	13.0%	14.0%	13.0%	7.5%	2.26	10.93	2.85	0.01	
Multi-Family Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	8.5%	9.0%	8.0%	4.0%	0.00	0.00	0.00	0.00	Central heating systems are not desired by the average multi-family resident.
Commercial, Office, Institutional Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.5%	0.5%	0.5%	1.0%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	1.0%	1.0%	1.0%	1.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	3.0%	3.5%	3.0%	2.5%	0.12	0.03	0.29	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	7.0%	3.0%	8.5%	19.5%	0.29	0.02	0.82	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.0%	1.0%	1.0%	0.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	9.5%	10.0%	9.0%	7.0%	0.39	0.08	0.87	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	12.5%	11.0%	13.5%	17.5%	0.51	0.09	1.31	0.00	
Industrial Uses											
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	0.0%	0.0%	0.5%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.5%	0.0%	1.0%	2.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	2.5%	2.0%	3.0%	5.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	0.5%	0.0%	1.0%	3.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Improved storage and handling of source materials	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Materials substitution (e.g., use water-based paints, life cycle analysis)	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Utilize efficient manufacturing processes	1.5%	0.5%	2.0%	6.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Resource recovery systems	3.0%	3.5%	3.0%	1.5%	0.00	0.00	0.00	0.00	

ESTIMATED WINTERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Mobile Sources											
Residential Uses											
	X	Allow satellite telecommunications centers in residential subdivisions	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such satellite telecommunications centers are superseded by other technology.
	X	Shuttle service from res. subdivisions to commercial core areas	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Residences are proposed in walking distance to proposed commercial areas.
	X	Construct bus passenger benches and shelters	0.2%	0.2%	0.2%	0.2%	2.64	0.22	0.37	0.25	
	X	Construct pedestrian facility improvements	0.1%	0.1%	0.1%	0.1%	1.32	0.11	0.18	0.12	
	X	Retail services within or adjacent to residential subdivisions	1.3%	1.0%	1.3%	1.3%	17.14	1.30	2.39	1.61	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	1.32	0.11	0.18	0.12	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	52.73	4.40	7.35	4.95	
	X	Construct bicycle trails	0.1%	0.1%	0.1%	0.1%	1.32	0.11	0.18	0.12	
Commercial, Office and Institutional Uses											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide separate windows for fast-food restaurants	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide video-conference facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	No commercial retail or office use on the site is expected to use fleet vehicles.
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	No commercial retail or office use on the site is expected to use fleet vehicles.
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Lunch shuttle service from a worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	Mixed use lots are expected to have food establishments located within walking distance for employees.
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	The requirement to achieve a specific AVR has been ruled unlawful by the federal government.
	X	Utilize satellite offices rather than regular worksite to reduce VMT	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Establish a home-based telecommuting program	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Offer travel incentives such as discounts on purchases for transit riders	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	8.06	0.44	1.15	0.76	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Residential uses are in close proximity and within walking distance to proposed commercial uses.
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Residential units within or adjacent to commercial developments	4.0%	3.1%	4.0%	4.0%	107.49	8.82	15.33	10.15	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	8.06	0.44	1.15	0.76	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	5.37	0.44	0.77	0.51	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Charge visitors to park	2.0%	1.5%	2.0%	2.0%	53.75	3.30	7.66	5.07	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	107.49	8.82	15.33	10.15	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Paid parking at walkup kiosks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide commuter information areas	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	Such programs are set up by and at the discretion of future occupants of the commercial uses.

ESTIMATED WINTERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Industrial Uses:											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide commuter information areas	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	
	X	Offer loans or other incentives to employees who move locally	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.00	0.00	0.00	0.00	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	0.00	0.00	0.00	0.00	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Lunch shuttle system from worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install aerodynamic add-on devices to heavy-duty trucks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce ship cruising speeds in the inner harbor	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low-emission fuels or electrify airport ground service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Engine tuning for marine vessels	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce number of aircraft engines used during idling	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install monitoring system to control airport shuttles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use centralized ground power systems for airport service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
Reduction in Stationary Sources Emissions (Pounds per day)							-9.56	-37.32	-13.62	-0.04	
Reduction in Mobile Sources Emissions (Pounds per day)							-382.82	-27.61	-64.34	-36.09	
Total Reduction in Emissions Based on Newhall Ranch FEIR Measures (Pounds per day)							-392.38	-64.93	-67.96	-36.13	
Percentage Reduced Based on Newhall Ranch FEIR Measures							-6.75%	-3.20%	-11.02%	-5.81%	
No Wood Burning Fire Places or Stoves in Residential Units							-1,784.09	-1,617.41	-18.35	-244.38	
Total Percent Reduction Based on Implementation of All Recommended Measures							-37.45%	-83.03%	-13.99%	-45.11%	
Total Reduced Stationary Source Emissions							11.96	41.52	18.02	0.05	
Total Reduced Mobile Source Emissions							3,622.85	302.40	512.55	341.24	
TOTAL REDUCED EMISSIONS							3,634.81	343.92	530.57	341.29	
SCAQMD Thresholds							550.00	55.00	55.00	150.00	
Project Air Quality Impacts Significant?							YES	YES	YES	YES	

ISCST3 Files

APPENDIX C

Calculations of Chronic Hazard Indices

Landmark Village EIR
Chronic Hazard Indices Calculations

Multiplying factor used in Cancer Risk Calculations:

40.96

Receptor	Risk (in one million)	Concentration ($\mu\text{g}/\text{m}^3$)	REL for DPM ($\mu\text{g}/\text{m}^3$)	Chronic Hazard Index
Residential	1.7	0.042	5	0.008
Workplace	1.2	0.029	5	0.006
Sensitive	0.3	0.007	5	0.001

REL: Reference Exposure Limit

DPM: Diesel Particulate Matter

(Adopted May 7, 1976) (Amended November 6, 1992)
(Amended July 9, 1993) (Amended February 14, 1997)
(Amended December 11, 1998)(Amended April 2, 2004)
(Amended June 3, 2005)

RULE 403. FUGITIVE DUST

(a) Purpose

The purpose of this Rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

(b) Applicability

The provisions of this Rule shall apply to any activity or man-made condition capable of generating fugitive dust.

(c) Definitions

- (1) ACTIVE OPERATIONS means any source capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, disturbed surface area, or heavy- and light-duty vehicular movement.
- (2) AGGREGATE-RELATED PLANTS are defined as facilities that produce and / or mix sand and gravel and crushed stone.
- (3) AGRICULTURAL HANDBOOK means the region-specific guidance document that has been approved by the Governing Board or hereafter approved by the Executive Officer and the U.S. EPA. For the South Coast Air Basin, the Board-approved region-specific guidance document is the Rule 403 Agricultural Handbook dated December 1998. For the Coachella Valley, the Board-approved region-specific guidance document is the Rule 403 Coachella Valley Agricultural Handbook dated April 2, 2004.
- (4) ANEMOMETERS are devices used to measure wind speed and direction in accordance with the performance standards, and maintenance and calibration criteria as contained in the most recent Rule 403 Implementation Handbook.
- (5) BEST AVAILABLE CONTROL MEASURES means fugitive dust control actions that are set forth in Table 1 of this Rule.

- (6) **BULK MATERIAL** is sand, gravel, soil, aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.
- (7) **CEMENT MANUFACTURING FACILITY** is any facility that has a cement kiln at the facility.
- (8) **CHEMICAL STABILIZERS** are any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law, rule or regulation. The chemical stabilizers shall meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.
- (9) **COMMERCIAL POULTRY RANCH** means any building, structure, enclosure, or premises where more than 100 fowl are kept or maintained for the primary purpose of producing eggs or meat for sale or other distribution.
- (10) **CONFINED ANIMAL FACILITY** means a source or group of sources of air pollution at an agricultural source for the raising of 3,360 or more fowl or 50 or more animals, including but not limited to, any structure, building, installation, farm, corral, coop, feed storage area, milking parlor, or system for the collection, storage, or distribution of solid and liquid manure; if domesticated animals, including horses, sheep, goats, swine, beef cattle, rabbits, chickens, turkeys, or ducks are corralled, penned, or otherwise caused to remain in restricted areas for commercial agricultural purposes and feeding is by means other than grazing.
- (11) **CONSTRUCTION/DEMOLITION ACTIVITIES** means any on-site mechanical activities conducted in preparation of, or related to, the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities: grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.
- (12) **CONTRACTOR** means any person who has a contractual arrangement to conduct an active operation for another person.
- (13) **DAIRY FARM** is an operation on a property, or set of properties that are contiguous or separated only by a public right-of-way, that raises cows or

produces milk from cows for the purpose of making a profit or for a livelihood. Heifer and calf farms are dairy farms.

- (14) **DISTURBED SURFACE AREA** means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas which have:
 - (A) been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;
 - (B) been paved or otherwise covered by a permanent structure; or
 - (C) sustained a vegetative ground cover of at least 70 percent of the native cover for a particular area for at least 30 days.
- (15) **DUST SUPPRESSANTS** are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.
- (16) **EARTH-MOVING ACTIVITIES** means the use of any equipment for any activity where soil is being moved or uncovered, and shall include, but not be limited to the following: grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, weed abatement through disking, and soil mulching.
- (17) **DUST CONTROL SUPERVISOR** means a person with the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule 403 requirements at an active operation.
- (18) **FUGITIVE DUST** means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of any person.
- (19) **HIGH WIND CONDITIONS** means that instantaneous wind speeds exceed 25 miles per hour.
- (20) **INACTIVE DISTURBED SURFACE AREA** means any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of 20 consecutive days.
- (21) **LARGE OPERATIONS** means any active operations on property which contains 50 or more acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of 3,850 cubic

meters (5,000 cubic yards) or more three times during the most recent 365-day period.

- (22) **OPEN STORAGE PILE** is any accumulation of bulk material, which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more square feet.
- (23) **PARTICULATE MATTER** means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.
- (24) **PAVED ROAD** means a public or private improved street, highway, alley, public way, or easement that is covered by typical roadway materials, but excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county, municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.
- (25) **PM₁₀** means particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.
- (26) **PROPERTY LINE** means the boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- (27) **RULE 403 IMPLEMENTATION HANDBOOK** means a guidance document that has been approved by the Governing Board on April 2, 2004 or hereafter approved by the Executive Officer and the U.S. EPA.
- (28) **SERVICE ROADS** are paved or unpaved roads that are used by one or more public agencies for inspection or maintenance of infrastructure and which are not typically used for construction-related activity.
- (29) **SIMULTANEOUS SAMPLING** means the operation of two PM₁₀ samplers in such a manner that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period which must be not less than 290 minutes and not more than 310 minutes.
- (30) **SOUTH COAST AIR BASIN** means the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange

County as defined in California Code of Regulations, Title 17, Section 60104. The area is bounded on the west by the Pacific Ocean, on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains, and on the south by the San Diego county line.

- (31) **STABILIZED SURFACE** means any previously disturbed surface area or open storage pile which, through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust and is demonstrated to be stabilized. Stabilization can be demonstrated by one or more of the applicable test methods contained in the Rule 403 Implementation Handbook.
 - (32) **TRACK-OUT** means any bulk material that adheres to and agglomerates on the exterior surface of motor vehicles, haul trucks, and equipment (including tires) that have been released onto a paved road and can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
 - (33) **TYPICAL ROADWAY MATERIALS** means concrete, asphaltic concrete, recycled asphalt, asphalt, or any other material of equivalent performance as determined by the Executive Officer, and the U.S. EPA.
 - (34) **UNPAVED ROADS** means any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by typical roadway materials. Public unpaved roads are any unpaved roadway owned by federal, state, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.
 - (35) **VISIBLE ROADWAY DUST** means any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
 - (36) **WIND-DRIVEN FUGITIVE DUST** means visible emissions from any disturbed surface area which is generated by wind action alone.
 - (37) **WIND GUST** is the maximum instantaneous wind speed as measured by an anemometer.
- (d) **Requirements**
- (1) No person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that:

- (A) the dust remains visible in the atmosphere beyond the property line of the emission source; or
 - (B) the dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook), if the dust emission is the result of movement of a motorized vehicle.
- (2) No person shall conduct active operations without utilizing the applicable best available control measures included in Table 1 of this Rule to minimize fugitive dust emissions from each fugitive dust source type within the active operation.
- (3) No person shall cause or allow PM₁₀ levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for PM₁₀ monitoring. If sampling is conducted, samplers shall be:
 - (A) Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM₁₀.
 - (B) Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.
- (4) No person shall allow track-out to extend 25 feet or more in cumulative length from the point of origin from an active operation. Notwithstanding the preceding, all track-out from an active operation shall be removed at the conclusion of each workday or evening shift.
- (5) No person shall conduct an active operation with a disturbed surface area of five or more acres, or with a daily import or export of 100 cubic yards or more of bulk material without utilizing at least one of the measures listed in subparagraphs (d)(5)(A) through (d)(5)(E) at each vehicle egress from the site to a paved public road.
 - (A) Install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long.

- (B) Pave the surface extending at least 100 feet and at least 20 feet wide.
 - (C) Utilize a wheel shaker/wheel spreading device consisting of raised dividers (rails, pipe, or grates) at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
 - (D) Install and utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
 - (E) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the actions specified in subparagraphs (d)(5)(A) through (d)(5)(D).
 - (6) Beginning January 1, 2006, any person who operates or authorizes the operation of a confined animal facility subject to this Rule shall implement the applicable conservation management practices specified in Table 4 of this Rule.
- (e) Additional Requirements for Large Operations
- (1) Any person who conducts or authorizes the conducting of a large operation subject to this Rule shall implement the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards can not be met through use of Table 2 actions; and shall:
 - (A) submit a fully executed Large Operation Notification (Form 403 N) to the Executive Officer within 7 days of qualifying as a large operation;
 - (B) include, as part of the notification, the name(s), address(es), and phone number(s) of the person(s) responsible for the submittal, and a description of the operation(s), including a map depicting the location of the site;
 - (C) maintain daily records to document the specific dust control actions taken, maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request;

- (D) install and maintain project signage with project contact signage that meets the minimum standards of the Rule 403 Implementation Handbook, prior to initiating any earthmoving activities;
 - (E) identify a dust control supervisor that:
 - (i) is employed by or contracted with the property owner or developer;
 - (ii) is on the site or available on-site within 30 minutes during working hours;
 - (iii) has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule requirements;
 - (iv) has completed the AQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class; and
 - (F) notify the Executive Officer in writing within 30 days after the site no longer qualifies as a large operation as defined by paragraph (c)(18).
- (2) Any Large Operation Notification submitted to the Executive Officer or AQMD-approved dust control plan shall be valid for a period of one year from the date of written acceptance by the Executive Officer. Any Large Operation Notification accepted pursuant to paragraph (e)(1), excluding those submitted by aggregate-related plants and cement manufacturing facilities must be resubmitted annually by the person who conducts or authorizes the conducting of a large operation, at least 30 days prior to the expiration date, or the submittal shall no longer be valid as of the expiration date. If all fugitive dust sources and corresponding control measures or special circumstances remain identical to those identified in the previously accepted submittal or in an AQMD-approved dust control plan, the resubmittal may be a simple statement of no-change (Form 403NC).
- (f) **Compliance Schedule**
The newly amended provisions of this Rule shall become effective upon adoption. Pursuant to subdivision (e), any existing site that qualifies as a large operation will have 60 days from the date of Rule adoption to comply with the notification and recordkeeping requirements for large operations. Any Large Operation

Notification or AQMD-approved dust control plan which has been accepted prior to the date of adoption of these amendments shall remain in effect and the Large Operation Notification or AQMD-approved dust control plan annual resubmittal date shall be one year from adoption of this Rule amendment.

(g) Exemptions

- (1) The provisions of this Rule shall not apply to:**
 - (A) Dairy farms.**
 - (B) Confined animal facilities provided that the combined disturbed surface area within one continuous property line is one acre or less.**
 - (C) Agricultural vegetative crop operations provided that the combined disturbed surface area within one continuous property line and not separated by a paved public road is 10 acres or less.**
 - (D) Agricultural vegetative crop operations within the South Coast Air Basin, whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:**
 - (i) voluntarily implements the conservation management practices contained in the Rule 403 Agricultural Handbook;**
 - (ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Agricultural Handbook; and**
 - (iii) makes the completed self-monitoring form available to the Executive Officer upon request.**
 - (E) Agricultural vegetative crop operations outside the South Coast Air Basin whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:**
 - (i) voluntarily implements the conservation management practices contained in the Rule 403 Coachella Valley Agricultural Handbook; and**
 - (ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Coachella Valley Agricultural Handbook; and**
 - (iii) makes the completed self-monitoring form available to the Executive Officer upon request.**

- (F) Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency.
 - (G) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions.
 - (H) Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.
 - (I) Any grading contractor, for a phase of active operations, subsequent to the contractual completion of that phase of earth-moving activities, provided that the required control measures have been implemented during the entire phase of earth-moving activities, through and including five days after the final grading inspection.
 - (J) Weed abatement operations ordered by a county agricultural commissioner or any state, county, or municipal fire department, provided that:
 - (i) mowing, cutting or other similar process is used which maintains weed stubble at least three inches above the soil; and
 - (ii) any discing or similar operation which cuts into and disturbs the soil, where watering is used prior to initiation of these activities, and a determination is made by the agency issuing the weed abatement order that, due to fire hazard conditions, rocks, or other physical obstructions, it is not practical to meet the conditions specified in clause (g)(1)(H)(i). The provisions this clause shall not exempt the owner of any property from stabilizing, in accordance with paragraph (d)(2), disturbed surface areas which have been created as a result of the weed abatement actions.
 - (K) sandblasting operations.
- (2) The provisions of paragraphs (d)(1) and (d)(3) shall not apply:
- (A) When wind gusts exceed 25 miles per hour, provided that:

- (i) The required Table 3 contingency measures in this Rule are implemented for each applicable fugitive dust source type, and;
 - (ii) records are maintained in accordance with subparagraph (e)(1)(C).
 - (B) To unpaved roads, provided such roads:
 - (i) are used solely for the maintenance of wind-generating equipment; or
 - (ii) are unpaved public alleys as defined in Rule 1186; or
 - (iii) are service roads that meet all of the following criteria:
 - (a) are less than 50 feet in width at all points along the road;
 - (b) are within 25 feet of the property line; and
 - (c) have a traffic volume less than 20 vehicle-trips per day.
 - (C) To any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigative actions are in conflict with the federal Endangered Species Act, as determined in writing by the State or federal agency responsible for making such determinations.
- (3) The provisions of (d)(2) shall not apply to any aggregate-related plant or cement manufacturing facility that implements the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards of paragraphs (d)(1) and (d)(3) can not be met through use of Table 2 actions.
 - (4) The provisions of paragraphs (d)(1), (d)(2), and (d)(3) shall not apply to:
 - (A) Blasting operations which have been permitted by the California Division of Industrial Safety; and
 - (B) Motion picture, television, and video production activities when dust emissions are required for visual effects. In order to obtain this exemption, the Executive Officer must receive notification in writing at least 72 hours in advance of any such activity and no nuisance results from such activity.
 - (5) The provisions of paragraph (d)(3) shall not apply if the dust control actions, as specified in Table 2, are implemented on a routine basis for

each applicable fugitive dust source type. To qualify for this exemption, a person must maintain records in accordance with subparagraph (e)(1)(C).

- (6) The provisions of paragraph (d)(4) shall not apply to earth coverings of public paved roadways where such coverings are approved by a local government agency for the protection of the roadway, and where such coverings are used as roadway crossings for haul vehicles provided that such roadway is closed to through traffic and visible roadway dust is removed within one day following the cessation of activities.
- (7) The provisions of subdivision (e) shall not apply to:
 - (A) officially-designated public parks and recreational areas, including national parks, national monuments, national forests, state parks, state recreational areas, and county regional parks.
 - (B) any large operation which is required to submit a dust control plan to any city or county government which has adopted a District-approved dust control ordinance.
 - (C) any large operation subject to Rule 1158, which has an approved dust control plan pursuant to Rule 1158, provided that all sources of fugitive dust are included in the Rule 1158 plan.
- (8) The provisions of subparagraph (e)(1)(A) through (e)(1)(C) shall not apply to any large operation with an AQMD-approved fugitive dust control plan provided that there is no change to the sources and controls as identified in the AQMD-approved fugitive dust control plan.

(h) Fees

Any person conducting active operations for which the Executive Officer conducts upwind/downwind monitoring for PM₁₀ pursuant to paragraph (d)(3) shall be assessed applicable Ambient Air Analysis Fees pursuant to Rule 304.1. Applicable fees shall be waived for any facility which is exempted from paragraph (d)(3) or meets the requirements of paragraph (d)(3).

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Backfilling	01-1 Stabilize backfill material when not actively handling; and 01-2 Stabilize backfill material during handling; and 01-3 Stabilize soil at completion of activity.	9 Mix backfill soil with water prior to moving 9 Dedicate water truck or high capacity hose to backfilling equipment 9 Empty loader bucket slowly so that no dust plumes are generated 9 Minimize drop height from loader bucket
Clearing and grubbing	02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and 02-2 Stabilize soil during clearing and grubbing activities; and 02-3 Stabilize soil immediately after clearing and grubbing activities.	9 Maintain live perennial vegetation where possible 9 Apply water in sufficient quantity to prevent generation of dust plumes
Clearing forms	03-1 Use water spray to clear forms; or 03-2 Use sweeping and water spray to clear forms; or 03-3 Use vacuum system to clear forms.	9 Use of high pressure air to clear forms may cause exceedance of Rule requirements
Crushing	04-1 Stabilize surface soils prior to operation of support equipment; and 04-2 Stabilize material after crushing.	9 Follow permit conditions for crushing equipment 9 Pre-water material prior to loading into crusher 9 Monitor crusher emissions opacity 9 Apply water to crushed material to prevent dust plumes

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Cut and fill	05-1 Pre-water soils prior to cut and fill activities; and	9 For large sites, pre-water with sprinklers or water trucks and allow time for penetration
	05-2 Stabilize soil during and after cut and fill activities.	9 Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts
Demolition – mechanical/manual	06-1 Stabilize wind erodible surfaces to reduce dust; and	9 Apply water in sufficient quantities to prevent the generation of visible dust plumes
	06-2 Stabilize surface soil where support equipment and vehicles will operate; and	
	06-3 Stabilize loose soil and demolition debris; and	
	06-4 Comply with AQMD Rule 1403.	
Disturbed soil	07-1 Stabilize disturbed soil throughout the construction site; and	9 Limit vehicular traffic and disturbances on soils where possible
	07-2 Stabilize disturbed soil between structures	9 If interior block walls are planned, install as early as possible 9 Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
Earth-moving activities	08-1 Pre-apply water to depth of proposed cuts; and	9 Grade each project phase separately, timed to coincide with construction phase 9 Upwind fencing can prevent material movement on site 9 Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
	08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and	
	08-3 Stabilize soils once earth-moving activities are complete.	

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Importing/exporting of bulk materials	09-1 Stabilize material while loading to reduce fugitive dust emissions; and 09-2 Maintain at least six inches of freeboard on haul vehicles; and 09-3 Stabilize material while transporting to reduce fugitive dust emissions; and 09-4 Stabilize material while unloading to reduce fugitive dust emissions; and 09-5 Comply with Vehicle Code Section 23114.	9 Use tarps or other suitable enclosures on haul trucks 9 Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage 9 Comply with track-out prevention/mitigation requirements 9 Provide water while loading and unloading to reduce visible dust plumes
Landscaping	10-1 Stabilize soils, materials, slopes	9 Apply water to materials to stabilize 9 Maintain materials in a crusted condition 9 Maintain effective cover over materials 9 Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes 9 Hydroseed prior to rain season
Road shoulder maintenance	11-1 Apply water to unpaved shoulders prior to clearing; and 11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	9 Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs 9 Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Screening	12-1 Pre-water material prior to screening; and 12-2 Limit fugitive dust emissions to opacity and plume length standards; and 12-3 Stabilize material immediately after screening.	9 Dedicate water truck or high capacity hose to screening operation 9 Drop material through the screen slowly and minimize drop height 9 Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point
Staging areas	13-1 Stabilize staging areas during use; and 13-2 Stabilize staging area soils at project completion.	9 Limit size of staging area 9 Limit vehicle speeds to 15 miles per hour 9 Limit number and size of staging area entrances/exits
Stockpiles/ Bulk Material Handling	14-1 Stabilize stockpiled materials. 14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	9 Add or remove material from the downwind portion of the storage pile 9 Maintain storage piles to avoid steep sides or faces

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Traffic areas for construction activities	15-1 Stabilize all off-road traffic and parking areas; and 15-2 Stabilize all haul routes; and 15-3 Direct construction traffic over established haul routes.	9 Apply gravel/paving to all haul routes as soon as possible to all future roadway areas 9 Barriers can be used to ensure vehicles are only used on established parking areas/haul routes
Trenching	16-1 Stabilize surface soils where trencher or excavator and support equipment will operate; and 16-2 Stabilize soils at the completion of trenching activities.	9 Pre-watering of soils prior to trenching is an effective preventive measure. For deep trenching activities, pre-trench to 18 inches soak soils via the pre-trench and resuming trenching 9 Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment
Truck loading	17-1 Pre-water material prior to loading; and 17-2 Ensure that freeboard exceeds six inches (CVC 23114)	9 Empty loader bucket such that no visible dust plumes are created 9 Ensure that the loader bucket is close to the truck to minimize drop height while loading
Turf Overseeding	18-1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and 18-2 Cover haul vehicles prior to exiting the site.	9 Haul waste material immediately off-site

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Unpaved roads/parking lots	19-1 Stabilize soils to meet the applicable performance standards; and 19-2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	9 Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements
Vacant land	20-1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

Table 2
DUST CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Earth-moving (except construction cutting and filling areas, and mining operations)	<p>(1a) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR</p> <p>(1a-1) For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.</p>
Earth-moving: Construction fill areas:	<p>(1b) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.</p>

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Earth-moving: Construction cut areas and mining operations:	(1c) Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b) Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c) Apply chemical stabilizers within five working days of grading completion; OR (2d) Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed surface areas	(3a) Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR (3b) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (3c) Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR (3d) Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Unpaved Roads	<p>(4a) Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR</p> <p>(4b) Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR</p> <p>(4c) Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.</p>
Open storage piles	<p>(5a) Apply chemical stabilizers; OR</p> <p>(5b) Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR</p> <p>(5c) Install temporary coverings; OR</p> <p>(5d) Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.</p>
All Categories	<p>(6a) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used.</p>

TABLE 3
CONTINGENCY CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY	CONTROL MEASURES
Earth-moving	(1A) Cease all active operations; OR (2A) Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	(0B) On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR (1B) Apply chemical stabilizers prior to wind event; OR (2B) Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR (3B) Take the actions specified in Table 2, Item (3c); OR (4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	(1C) Apply chemical stabilizers prior to wind event; OR (2C) Apply water twice per hour during active operation; OR (3C) Stop all vehicular traffic.
Open storage piles	(1D) Apply water twice per hour; OR (2D) Install temporary coverings.
Paved road track-out	(1E) Cover all haul vehicles; OR (2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	(1F) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

Table 4
(Conservation Management Practices for Confined Animal Facilities)

SOURCE CATEGORY	CONSERVATION MANAGEMENT PRACTICES
Manure Handling (Only applicable to Commercial Poultry Ranches)	(1a) Cover manure prior to removing material off-site; AND (1b) Spread the manure before 11:00 AM and when wind conditions are less than 25 miles per hour; AND (1c) Utilize coning and drying manure management by removing manure at laying hen houses at least twice per year and maintain a base of no less than 6 inches of dry manure after clean out; or in lieu of complying with conservation management practice (1c), comply with conservation management practice (1d). (1d) Utilize frequent manure removal by removing the manure from laying hen houses at least every seven days and immediately thin bed dry the material.
Feedstock Handling	(2a) Utilize a sock or boot on the feed truck auger when filling feed storage bins.
Disturbed Surfaces	(3a) Maintain at least 70 percent vegetative cover on vacant portions of the facility; OR (3b) Utilize conservation tillage practices to manage the amount, orientation and distribution of crop and other plant residues on the soil surface year-round, while growing crops (if applicable) in narrow slots or tilled strips; OR (3c) Apply dust suppressants in sufficient concentrations and frequencies to maintain a stabilized surface.
Unpaved Roads	(4a) Restrict access to private unpaved roads either through signage or physical access restrictions and control vehicular speeds to no more than 15 miles per hour through worker notifications, signage, or any other necessary means; OR (4b) Cover frequently traveled unpaved roads with low silt content material (i.e., asphalt, concrete, recycled road base, or gravel to a minimum depth of four inches); OR (4c) Treat unpaved roads with water, mulch, chemical dust suppressants or other cover to maintain a stabilized surface.
Equipment Parking Areas	(5a) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (5b) Apply material with low silt content (i.e., asphalt, concrete, recycled road base, or gravel to a depth of four inches).

Mitigated Construction Emissions

Project Name River Village Mitigated Emissions
 Subphase Weeks 1 thru 19
 Length of Subphase (weeks) 19.00
 Year 2006

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
FugitiveDust	130.69	182.74	18.98	1.69	19,407.42	
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	--	3.30	
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	65.65	
Worker Commute Trips	--	--	--	--	0.11	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	1.69	9,703.71	Water Exposed Surfaces Three Times Daily
On-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	2.64	Assumes Use of Aqueous Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	97.16	Assumes Use of Aqueous Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	--	0.00	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	330.37	207.06	721.79	0.02	9,672.96	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
 Subphase Weeks 20 thru 39
 Length of Subphase (weeks) 20.00
 Year 2006

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	130.69	182.74	18.98	1.69	19,393.70	Water Exposed Surfaces Three Times Daily Aqueous Fuel, Cooled Exhaust Gas Recirculation Aqueous Fuel, Cooled Exhaust Gas Recirculation No Feasible Mitigation Available
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	0.02	3.30	
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	65.65	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.11	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	1.69	9,696.85	
On-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	2.64	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	97.16	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.23	0.06	46.72	None Available Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Feasible Mitigation Available
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	23.98	2.86	12.29	0.11	0.28	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	4.00	0.58	3.35	0.06	0.09	
On-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	490.05	227.72	1,255.02	0.13	9,643.99	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
Subphase Weeks 40 thru 46
Length of Subphase (weeks) 7.00
Year 2006

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	130.69	182.74	18.98	1.69	19,407.42	
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	1.69	3.30	
Off-Road Diesel Exhaust	15.38	1.71	2.90	0.02	63.65	
Worker Commute Trips					0.11	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	1.69	9,703.71	Water Exposed Surfaces Three Times Daily
On-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	2.64	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	97.16	
Worker Commute Trips						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	
Off-Road Diesel Exhaust Emissions	4.44	0.63	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	12.27	1.35	2.28	0.02	0.09	
Worker Commute Emissions						
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	None Available
On-Road Diesel Exhaust	4.00	0.58	3.35	0.06	0.09	
Off-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	232.74	1,654.08	0.04	72.90	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions		151.01				
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,514.14	200.47	893.20	0.00	107.89	
Off-Gas Emissions		n/a				
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:						
	697.59	405.10	2,015.39	0.11	9,616.01	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
 Subphase Weeks 47 thru 91
 Length of Subphase (weeks) 45.00
 Year 2006

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	--	--	--	--	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	--	--	--	--	21.98	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	10.99	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	--	1.01	--	--	--	
Off-Road Diesel Exhaust Emissions	1,332.50	167.28	1,126.24	--	46.72	
On-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
Worker Commute Emissions	12.27	1.35	2.28	0.02	0.09	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	None Available
On-Road Diesel Exhaust	4.00	0.58	3.35	0.06	0.09	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	222.74	1,654.08	--	72.90	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions	--	151.01	--	--	--	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,514.14	200.47	893.20	0.00	107.89	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	367.22	198.03	1,293.59	0.09	-45.97	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	No Feasible Mitigation Available

Project Name River Village Mitigated Emissions
 Subphase Week 92
 Length of Subphase (weeks) 1.00
 Year 2007

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,373.05	167.28	1,085.87	41.93	0.10	
Off-Road Diesel Exhaust Emissions	4.05	0.61	5.80	0.01	0.08	
On-Road Diesel Exhaust Emissions	11.29	1.25	2.11	0.01	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	3.65	0.54	3.13	0.01	0.08	None Available
On-Road Diesel Exhaust	1,235.75	150.55	586.37	n/a	62.06	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction	2,159.16	275.61	1,931.00	79.99	0.21	
Off-Road Diesel Exhaust	28.13	3.11	5.26	0.02	0.21	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	28.13	3.11	5.26	0.02	0.21	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	1,943.24	248.05	1,042.74	0.00	118.39	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	421.17	204.32	1,403.05	0.05	-58.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	No Feasible Mitigation Available

Project Name River Village Mitigated Emissions
Subphase Weeks 93 thru 144
Length of Subphase (weeks) 52.00
Year 2007

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,373.05	167.28	1,085.87	41.93		
Off-Road Diesel Exhaust Emissions	0.08	0.01	0.11	0.00	0.00	
On-Road Diesel Exhaust Emissions	11.29	1.25	2.11	0.01	0.08	
Worker Commute Emissions						
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	None Available
On-Road Diesel Exhaust	0.07	0.01	0.06	0.00	0.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,235.75	150.55	586.37	n/a	62.06	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,872.07	240.07	1,693.55	70.48		
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18	
Architectural Painting						
Off-Gas Emissions	141.73					
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,684.86	216.06	914.52	0.00	104.31	
Off-Gas Emissions		n/a				
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	385.62	189.23	1,290.00	0.05	-53.50	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	No Feasible Mitigation Available

Project Name River Village Mitigated Emissions
 Subphase Weeks 145 thru 158
 Length of Subphase (weeks) 14.00
 Year 2008

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,385.56	167.28	1,058.35	0.01	38.46	None Available
Off-Road Diesel Exhaust Emissions	3.70	0.57	5.39	0.01	0.10	
On-Road Diesel Exhaust Emissions	10.38	1.15	1.94	0.01	0.08	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	3.33	0.51	2.91	0.01	0.08	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
On-Road Diesel Exhaust	1,247.00	150.55	571.51	n/a	56.92	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	1,685.60	212.51	1,453.30	0.02	58.55	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	20.77	2.30	3.89	0.02	0.17	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	141.66	17.10	141.66	0.02	0.17	
Off-Gas Emissions	20.77	2.30	3.89	0.02	0.17	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Mitigation Available
Mitigation/Reduction	1,517.04	191.26	785.05	0.00	86.65	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	359.40	186.46	1,167.78	0.04	-46.13	No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 159 thru 178
Length of Subphase (weeks) 21.00
Year 2009

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	1,726.62	212.51	1,394.91	0.02	53.47	
Off-Road Diesel Exhaust	19.09	2.13	3.58	0.02	0.17	
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17	
Architectural Painting	19.09	2.13	3.58	0.02	0.17	
Off-Gas Emissions	19.09	2.13	3.58	0.02	0.17	
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	1,553.96	191.26	753.25	0.00	79.14	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	210.84	167.17	648.81	0.03	-25.33	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	No Feasible Mitigation Available

Project Name River Village Mitigated Emissions
Subphase Weeks 179 thru 196
Length of Subphase (weeks) 18.00
Year 2009

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	1,515.09	187.20	1,239.14	0.02	48.23	
Off-Road Diesel Exhaust	17.12	1.91	3.21	0.02	0.15	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	141.24	1.91	3.21	0.02	0.15	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	1,363.58	168.48	669.14	0.00	71.38	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Mitigation Available
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Net Emission Totals:	185.74	163.78	576.42	0.03	-22.85	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 197 thru 210
Length of Subphase (weeks) 13.00
Year 2009

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Architectural Painting						
Off-Gas Emissions	0.00	87.64	0.00	0.00	0.00	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	23.03	90.21	4.31	0.02	0.20	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	No	No	No	

Project Name River Village Mitigated Emissions
 Subphase Weeks 211 thru 220
 Length of Subphase (weeks) 10.00
 Year 2010

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	15.00	40.94	2.78	0.01	0.14	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	No	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 221 thru 235
Length of Subphase (weeks) 15.00
Year 2010

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	---	---	---	---	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	---	---	---	---	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	---	---	---	---	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	---	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	---	---	---	---	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	---	0.00	---	---	---	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	---	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Off-Road Diesel Exhaust	491.65	59.17	372.96	---	13.64	
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04	
Architectural Painting						
Off-Gas Emissions	---	11.78	---	---	---	
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04	
Mitigation/Reduction						
Off-Road Diesel Exhaust	442.49	53.25	201.40	0.00	20.19	
Off-Gas Emissions	---	n/a	---	---	---	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	58.05	18.70	173.21	0.01	-6.46	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	Yes	No	No	

River Village Office Construction Only Mitigated Emissions

Weeks of Construction: 140

Year Constr. Begins: 2015

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Off-Road Diesel Exhaust	884.12	106.21	665.11	--	23.88	
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08	
Architectural Painting						
Off-Gas Emissions	--	38.48	--	--	--	
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08	
Mitigation/Reduction						
Off-Road Diesel Exhaust	795.71	95.59	359.16	0.00	35.34	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	110.22	51.50	318.01	0.03	-11.31	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	Yes	No	No	

Mitigated Construction Emissions

Project Name River Village Mitigated Emissions
Subphase Weeks 1 thru 19
Length of Subphase (weeks) 19.00
Year 2006

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
FugitiveDust	130.69	182.74	18.98	1.69	19,407.42	
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	--	3.30	
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	65.65	
Worker Commute Trips	--	--	--	--	0.11	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	1.69	9,703.71	Water Exposed Surfaces Three Times Daily
On-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	2.64	Assumes Use of Aqueous Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	97.16	Assumes Use of Aqueous Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	--	0.00	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	330.37	207.06	721.79	0.02	9,672.96	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
 Subphase Weeks 20 thru 39
 Length of Subphase (weeks) 20.00
 Year 2006

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	--	--	--	--	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	--	--	--	--	19,393.70	
On-Road Diesel Exhaust	130.69	182.74	18.98	1.69	3.30	
Off-Road Diesel Exhaust	1,841.01	226.11	1,521.55	--	65.65	
Worker Commute Trips	15.58	1.71	2.90	0.02	0.11	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	9,696.85	Water Exposed Surfaces Three Times Daily
On-Road Diesel Exhaust	0.00	0.00	0.00	1.69	2.64	Aqueous Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	97.16	Aqueous Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	--	1.01	--	--	--	
Off-Road Diesel Exhaust Emissions	1,352.50	167.28	1,126.23	--	46.72	
On-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
Worker Commute Emissions	23.98	2.86	12.29	0.11	0.28	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	None Available
On-Road Diesel Exhaust	4.00	0.58	3.35	0.06	0.09	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting						
Off-Gas Emissions	--	0.00	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	490.05	227.72	1,255.02	0.13	9,643.99	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
Subphase Weeks 40 thru 46
Length of Subphase (weeks) 7.00
Year 2006

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
Fugitive Dust	130.69	182.74	18.98	1.69	19,407.42	
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	1.69	3.30	
Off-Road Diesel Exhaust	15.38	1.71	2.90	0.02	63.65	
Worker Commute Trips					0.11	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	1.69	9,703.71	Water Exposed Surfaces Three Times Daily
On-Road Diesel Exhaust	1,656.91	203.50	821.64	2.64	2.64	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	97.16	
Worker Commute Trips				0.00	Aqueous Fuel, Cooled Exhaust Gas Recirculation	
Mitigation/Reduction					Aqueous Fuel, Cooled Exhaust Gas Recirculation	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	
Off-Road Diesel Exhaust Emissions	4.44	0.63	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	12.27	1.35	2.28	0.02	0.09	
Worker Commute Emissions						
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	None Available
On-Road Diesel Exhaust	4.00	0.58	3.35	0.06	0.09	
Off-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	232.74	1,654.08		72.90	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions		151.01				
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,514.14	200.47	893.20	0.00	107.89	
Off-Gas Emissions		n/a				
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:						
SCAQMD Threshold:	697.59	405.10	2,015.39	0.11	9,616.01	
Exceeds Threshold?	550.00	75.00	100.00	150.00	150.00	
	Yes	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
 Subphase Weeks 47 thru 91
 Length of Subphase (weeks) 45.00
 Year 2006

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	--	--	--	--	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	--	--	--	--	21.58	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	10.99	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	--	1.01	--	--	--	
Off-Road Diesel Exhaust Emissions	1,332.50	167.28	1,126.24	--	46.72	
On-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
Worker Commute Emissions	12.27	1.35	2.28	0.02	0.09	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	None Available
On-Road Diesel Exhaust	4.00	0.58	3.35	0.06	0.09	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	222.74	1,654.08	--	72.90	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions	--	151.01	--	--	--	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,514.14	200.47	893.20	0.00	107.89	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	367.22	198.03	1,293.59	0.09	-45.97	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	No Feasible Mitigation Available

Project Name River Village Mitigated Emissions
Subphase Week 92
Length of Subphase (weeks) 1.00
Year 2007

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,373.05	167.28	1,085.87	41.93	0.10	
Off-Road Diesel Exhaust Emissions	4.05	0.61	5.80	0.01	0.00	
On-Road Diesel Exhaust Emissions	11.29	1.25	2.11	0.01	0.08	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	3.65	0.54	3.13	0.01	0.08	None Available
On-Road Diesel Exhaust	1,235.75	150.55	586.37	n/a	62.06	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction	2,159.16	275.61	1,931.00	79.99	0.21	
Off-Road Diesel Exhaust	28.13	3.11	5.26	0.02	0.21	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	151.50	18.18	12.12	0.01	0.01	
Worker Commute Trips	28.13	3.11	5.26	0.02	0.21	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	1,943.24	248.05	1,042.74	0.00	118.39	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	421.17	204.32	1,403.05	0.05	-58.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	No Feasible Mitigation Available

Project Name River Village Mitigated Emissions
Subphase Weeks 93 thru 144
Length of Subphase (weeks) 52.00
Year 2007

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,373.05	167.28	1,085.87	41.93		
Off-Road Diesel Exhaust Emissions	0.08	0.01	0.11	0.00	0.00	
On-Road Diesel Exhaust Emissions	11.29	1.25	2.11	0.01	0.08	
Worker Commute Emissions						
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	None Available
On-Road Diesel Exhaust	0.07	0.01	0.06	0.00	0.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,235.75	150.55	586.37	n/a	62.06	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,872.07	240.07	1,693.55	70.48		
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18	
Architectural Painting						
Off-Gas Emissions	141.73					
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,684.86	216.06	914.52	0.00	104.31	
Off-Gas Emissions		n/a				
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	385.62	189.23	1,290.00	0.05	-53.50	No Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Feasible Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
 Subphase Weeks 145 thru 158
 Length of Subphase (weeks) 14.00
 Year 2008

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,385.56	167.28	1,058.35	0.01	38.46	None Available
Off-Road Diesel Exhaust Emissions	3.70	0.57	5.39	0.01	0.10	
On-Road Diesel Exhaust Emissions	10.38	1.15	1.94	0.01	0.08	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	3.33	0.51	2.91	0.01	0.08	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
On-Road Diesel Exhaust	1,247.00	150.55	571.51	n/a	56.92	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	1,685.60	212.51	1,453.30	0.02	58.55	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	20.77	2.30	3.89	0.02	0.17	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	141.66	17.10	141.66	0.02	0.17	
Off-Gas Emissions	20.77	2.30	3.89	0.02	0.17	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Mitigation Available
Mitigation/Reduction	1,517.04	191.26	785.05	0.00	86.65	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	359.40	186.46	1,167.78	0.04	-46.13	No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 159 thru 178
Length of Subphase (weeks) 21.00
Year 2009

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,726.62	212.51	1,394.91	0.02	53.47	
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17	
Architectural Painting						
Off-Gas Emissions	141.66					
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,553.96	191.26	753.25	0.00	79.14	
Off-Gas Emissions		n/a				
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	210.84	167.17	648.81	0.03	-25.33	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 179 thru 196
Length of Subphase (weeks) 18.00
Year 2009

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	1,515.09	187.20	1,239.14	0.02	48.23	
Off-Road Diesel Exhaust	17.12	1.91	3.21	0.02	0.15	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	141.24	1.91	3.21	0.02	0.15	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	1,363.58	168.48	669.14	0.00	71.38	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Mitigation Available
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Net Emission Totals:	185.74	163.78	576.42	0.03	-22.85	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 197 thru 210
Length of Subphase (weeks) 13.00
Year 2009

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	11.51	1.29	2.16	0.01	0.10	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Mitigation Available
Net Emission Totals:	23.03	90.21	4.31	0.02	0.20	No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	No	No	No	

Project Name River Village Mitigated Emissions
 Subphase Weeks 211 thru 220
 Length of Subphase (weeks) 10.00
 Year 2010

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	15.00	40.94	2.78	0.01	0.14	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	No	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 221 thru 235
Length of Subphase (weeks) 15.00
Year 2010

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	--	--	--	--	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	--	--	--	--	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	--	0.00	--	--	--	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	--	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Off-Road Diesel Exhaust	491.65	59.17	372.96	--	13.64	
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04	
Architectural Painting						
Off-Gas Emissions	--	11.78	--	--	--	
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04	
Mitigation/Reduction						
Off-Road Diesel Exhaust	442.49	53.25	201.40	0.00	20.19	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	58.05	18.70	173.21	0.01	-6.46	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	Yes	No	No	

River Village Office Construction Only Mitigated Emissions

Weeks of Construction: 140

Year Constr. Begins: 2015

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	884.12	106.21	665.11	--	23.88	
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08	
Architectural Painting						
Off-Gas Emissions	--	38.48	--	--	--	
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08	
Mitigation/Reduction						
Off-Road Diesel Exhaust	795.71	95.59	359.16	0.00	35.34	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	110.22	51.50	310.01	0.03	-11.31	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	Yes	No	No	

ESTIMATE SUMMERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Input Fields		Unmitigated Emissions in Pounds per Day			
LAND USE		CO	VOC	NO _x	PM ₁₀
Single Family Residential Uses	Vehicular Sources	699.33	56.31	60.94	56.43
	Area Sources	9.36	39.22	13.67	0.04
Multi-Family Residential Uses	Vehicular Sources	723.83	64.47	65.87	64.23
	Area Sources	7.36	38.62	8.27	0.03
Commercial/Office/Institutional Uses	Vehicular Sources	2,762.13	221.64	265.11	253.67
	Area Sources	4.10	0.80	9.70	0.02
Wood-Burning Fire Place Emissions	Vehicular Sources	0.00	0.00	0.00	0.00
	Area Sources	0.00	0.00	0.00	0.00
Total Emissions	Vehicular Sources	4,155.39	342.42	391.84	377.33
	Area Sources	21.32	78.84	31.64	0.09
Total Non-Reduced Emissions		4,177.41	421.26	423.48	377.42

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Stationary Sources											
All Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	10.0%	11.0%	9.5%	4.5%	1.74	8.58	2.06	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use built-in energy-efficient appliances	3.0%	2.5%	3.0%	6.5%	0.32	1.95	0.66	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	4.5%	4.5%	4.0%	2.5%	0.78	3.51	0.88	0.00	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use fuel cells in residential subdivisions to produce heat and elec.	1.0%	0.0%	1.5%	7.0%	0.17	0.00	0.31	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	13.5%	14.0%	13.0%	10.5%	2.35	10.93	2.85	0.01	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.5%	1.5%	1.5%	1.5%	0.26	1.17	0.31	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	13.0%	14.0%	13.0%	7.5%	2.26	10.93	2.85	0.01	
Multi-Family Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	8.5%	9.0%	8.0%	4.0%	0.00	0.00	0.00	0.00	Central heating systems are not desired by the average multi-family resident.
Commercial, Office, Institutional Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.5%	0.5%	0.5%	1.0%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	1.0%	1.0%	1.0%	1.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	3.0%	3.5%	3.0%	2.5%	0.12	0.03	0.25	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	7.0%	3.0%	8.5%	19.5%	0.29	0.02	0.82	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.0%	1.0%	1.0%	0.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	9.5%	10.0%	9.0%	7.0%	0.39	0.08	0.87	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	12.5%	11.0%	13.5%	17.5%	0.51	0.09	1.31	0.00	
Industrial Uses											
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	0.0%	0.0%	0.5%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.5%	0.0%	1.0%	2.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	2.5%	2.0%	3.0%	5.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	0.5%	0.0%	1.0%	3.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Improved storage and handling of source materials	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Materials substitution (e.g., use water-based paints, life cycle analysis)	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Utilize efficient manufacturing processes	1.5%	0.5%	2.0%	6.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Resource recovery systems	3.0%	3.5%	3.0%	1.5%	0.00	0.00	0.00	0.00	

ESTIMATED SUMMERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Mobile Sources											
Residential Uses											
	X	Allow satellite telecommunications centers in residential subdivisions	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Satellite telecommunications centers are superseded by other technology. Residences are proposed in walking distance to proposed commercial areas.
	X	Shuttle service from res. subdivisions to commercial core areas	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
X		Construct bus passenger benches and shelters	0.2%	0.2%	0.2%	0.2%	2.79	0.24	0.25	0.25	
X		Construct pedestrian facility improvements	0.1%	0.1%	0.1%	0.1%	1.39	0.12	0.13	0.12	
X		Rail services within or adjacent to residential subdivisions	1.3%	1.0%	1.3%	1.3%	18.12	1.21	1.65	1.61	
X		Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	1.39	0.12	0.13	0.12	
X		Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	55.75	4.83	5.07	4.95	
X		Construct bicycle trails	0.1%	0.1%	0.1%	0.1%	1.39	0.12	0.13	0.12	
Commercial, Office and Institutional Uses											
X		Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. No commercial retail or office use on the site is expected to use fleet vehicles. No commercial retail or office use on the site is expected to use fleet vehicles. There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure. Mixed use lots are expected to have food establishments located within walking distance for employees. Such programs are set up by and at the discretion of future occupants of the commercial uses. The requirement to achieve a specific AVR has been ruled unlawful by the federal government. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. Residential uses are in close proximity and within walking distance to proposed commercial uses. There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure. There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses.
X		Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Provide separate windows for fast-food restaurants	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Provide video-conference facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Lunch shuttle service from a worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Utilize satellite offices rather than regular worksite to reduce VMT	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Establish a home-based telecommuting program	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
X		Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
	X	Offer travel incentives such as discounts on purchases for transit riders	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	8.29	0.44	0.80	0.76	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	
X		Residential units within or adjacent to commercial developments	4.0%	3.1%	4.0%	4.0%	110.49	6.87	10.60	10.15	
X		Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
X		Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	8.29	0.44	0.80	0.76	
X		Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	5.52	0.44	0.53	0.51	
X		Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	
X		Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Charge visitors to park	2.0%	1.5%	2.0%	2.0%	55.24	3.32	5.30	5.07	
X		Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	110.49	8.87	10.60	10.15	
X		Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Paid parking at walkup kiosks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Provide commuter information areas	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	

ESTIMATED SUMMERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Industrial Uses											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide commuter information areas	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	
	X	Offer loans or other incentives to employees who move locally	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.00	0.00	0.00	0.00	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	0.00	0.00	0.00	0.00	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Lunch shuttle system from worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install aerodynamic add-on devices to heavy-duty trucks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce ship cruising speeds in the inner harbor	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low-emission fuels or electrify airport ground service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Engine tuning for marine vessels	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce number of aircraft engines used during idling	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install monitoring system to control airport shuttles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use centralized ground power systems for airport service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
Reduction in Stationary Sources Emissions (Pounds per day)							-9.56	-37.32	-13.62	-0.04	
Reduction in Mobile Sources Emissions (Pounds per day)							-395.72	-28.36	-37.57	-36.09	
Total Reduction in Emissions Based on Newhall Ranch FEIR Measures (Pounds per day)							-405.28	-65.68	-51.19	-36.13	
Percentage Reduced Based on Newhall Ranch FEIR Measures							-9.70%	-15.59%	-12.09%	-9.57%	
No Wood Burning Fire Places or Stoves in Residential Units							0.00	0.00	0.00	0.00	
Total Percent Reduction Based on Implementation of All Recommended Measures							-9.70%	-15.59%	-12.09%	-9.57%	
Total Reduced Stationary Source Emissions							11.96	41.52	18.02	0.05	
Total Reduced Mobile Source Emissions							3,760.17	314.06	354.27	341.24	
TOTAL REDUCED EMISSIONS							3,772.13	355.58	372.29	341.29	
SCAQMD Thresholds							550.00	55.00	55.00	150.00	
Project Air Quality Impacts Significant?							YES	YES	YES	YES	

ESTIMATED WINTERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Input Fields		Unmitigated Emissions in Pounds per Day			
LAND USE		CO	VOC	NO _x	PM ₁₀
Single Family Residential Uses	Vehicular Sources	633.57	52.80	88.27	99.43
	Area Sources	9.86	59.22	13.67	0.04
Multi-Family Residential Uses	Vehicular Sources	684.75	57.17	95.39	64.23
	Area Sources	7.56	38.82	8.27	0.03
Commercial/Office/Institutional Uses	Vehicular Sources	2,687.35	220.04	383.23	253.67
	Area Sources	4.10	0.80	9.70	0.02
Wood-Burning Fire Place Emissions	Vehicular Sources	0.00	0.00	0.00	0.00
	Area Sources	1,784.09	1,617.41	18.36	244.28
Total Emissions	Vehicular Sources	4,005.67	330.01	566.89	377.33
	Area Sources	1,805.61	1,696.25	50.00	244.47
Total Non-Reduced Emissions		5,811.28	2,026.26	616.89	621.80

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES	
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀		
Stationary Sources												
All Residential Uses												
<input checked="" type="checkbox"/>		Use solar or low emission water heaters	10.0%	11.0%	9.5%	4.5%	1.74	8.58	2.08	0.00	Parking structures are not proposed within the project.	
<input checked="" type="checkbox"/>		Use built-in energy-efficient appliances	3.0%	2.5%	3.0%	6.5%	0.52	1.95	0.66	0.00		
<input checked="" type="checkbox"/>		Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Use double-glass paned windows	4.5%	4.5%	4.0%	2.5%	0.78	3.51	0.88	0.00		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Use lighting controls and energy efficient lighting	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Use fuel cells in residential subdivisions to produce heat and elec.	1.0%	0.0%	1.5%	7.0%	0.17	0.00	0.33	0.00		
<input checked="" type="checkbox"/>		Orient buildings to the north	13.5%	14.0%	13.0%	10.5%	2.35	10.93	2.85	0.01		
<input checked="" type="checkbox"/>		Use light-colored roof materials to reflect heat	1.5%	1.5%	1.5%	1.5%	0.26	1.17	0.33	0.00		
<input checked="" type="checkbox"/>		Comply with Title 24	13.0%	14.0%	13.0%	7.5%	2.26	10.93	2.85	0.01		
Multi-Family Residential Uses												
<input checked="" type="checkbox"/>		Use central water heating systems	8.5%	9.0%	8.0%	4.0%	0.00	0.00	0.00	0.00	Central heating systems are not desired by the average multi-family resident.	
Commercial, Office, Institutional Uses												
<input checked="" type="checkbox"/>		Use solar or low emission water heaters	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	Parking structures are not proposed within the project.	
<input checked="" type="checkbox"/>		Use central water heating systems	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00		
<input checked="" type="checkbox"/>		Provide shade trees to reduce heating/cooling needs	0.5%	0.5%	0.5%	1.0%	0.02	0.00	0.05	0.00		
<input checked="" type="checkbox"/>		Use energy-efficient and automated controls for air conditioners	1.0%	1.0%	1.0%	1.5%	0.04	0.01	0.10	0.00		
<input checked="" type="checkbox"/>		Use double-glass paned windows	3.0%	3.5%	3.0%	2.5%	0.12	0.03	0.29	0.00		
<input checked="" type="checkbox"/>		Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Use lighting controls and energy efficient lighting	7.0%	3.0%	8.5%	19.5%	0.29	0.02	0.82	0.00		
<input checked="" type="checkbox"/>		Use light-colored roof materials to reflect heat	1.0%	1.0%	1.0%	0.5%	0.04	0.01	0.10	0.00		
<input checked="" type="checkbox"/>		Comply with Title 24	9.5%	10.0%	9.0%	7.0%	0.39	0.08	0.87	0.00		
<input checked="" type="checkbox"/>		Orient buildings to the north	12.5%	11.0%	13.5%	17.5%	0.51	0.09	1.31	0.00		
Industrial Uses												
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.	
<input checked="" type="checkbox"/>		Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	1.0%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Use double-glass paned windows	0.0%	0.0%	0.5%	1.0%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Use lighting controls and energy efficient lighting	0.5%	0.0%	1.0%	2.5%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Use light-colored roof materials to reflect heat	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Orient buildings to the north	2.5%	2.0%	3.0%	5.5%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Comply with Title 24	0.5%	0.0%	1.0%	3.0%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Improved storage and handling of source materials	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Materials substitution (e.g., use water-based paints, life cycle analysis)	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Utilize efficient manufacturing processes	1.5%	0.5%	2.0%	6.0%	0.00	0.00	0.00	0.00		
<input checked="" type="checkbox"/>		Resource recovery systems	3.0%	3.5%	3.0%	1.5%	0.00	0.00	0.00	0.00		

ESTIMATED WINTERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Mobile Sources											
Residential Uses											
	X	Allow satellite telecommunications centers in residential subdivisions	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Satellite telecommunications centers are superseded by other technology.
	X	Shuttle service from res. subdivisions to commercial core areas	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Residences are proposed in walking distance to proposed commercial areas.
X		Construct bus passenger benches and shelters	0.2%	0.2%	0.2%	0.2%	2.64	0.22	0.37	0.25	
X		Construct pedestrian facility improvements	0.1%	0.1%	0.1%	0.1%	1.32	0.11	0.18	0.12	
X		Retail services within or adjacent to residential subdivisions	1.3%	1.0%	1.3%	1.3%	17.14	1.10	2.39	1.61	
X		Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	1.32	0.11	0.18	0.12	
X		Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	52.73	4.40	7.35	4.95	
X		Construct bicycle trails	0.1%	0.1%	0.1%	0.1%	1.32	0.11	0.18	0.12	
Commercial, Office and Institutional Uses											
X		Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
X		Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Provide separate windows for fast-food restaurants	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Provide video-conference facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	No commercial retail or office use on the site is expected to use fleet vehicles.
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	No commercial retail or office use on the site is expected to use fleet vehicles.
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Lunch shuttle service from a worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	Mixed use lots are expected to have food establishments located within walking distance for employees.
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	The requirement to achieve a specific AVR has been ruled unlawful by the federal government.
	X	Utilize satellite offices rather than regular worksite to reduce VMT	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Establish a home-based telecommuting program	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
X		Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Offer travel incentives such as discounts on purchases for transit riders	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
X		Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	8.06	0.44	1.15	0.76	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Residential uses are in close proximity and within walking distance to proposed commercial uses.
X		Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
X		Residential units within or adjacent to commercial developments	4.0%	3.1%	4.0%	4.0%	107.49	6.82	15.33	10.15	
X		Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
X		Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	8.06	0.44	1.15	0.76	
X		Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	5.37	0.44	0.77	0.51	
X		Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
X		Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Charge visitors to park	2.0%	1.5%	2.0%	2.0%	53.75	3.30	7.66	5.07	
X		Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	107.49	8.80	15.33	10.15	
X		Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Paid parking at walkup kiosks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
X		On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
X		Provide commuter information areas	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	Such programs are set up by and at the discretion of future occupants of the commercial uses.

ESTIMATED WINTERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Industrial Uses											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide commuter information areas	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	
	X	Offer loans or other incentives to employees who move locally	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.00	0.00	0.00	0.00	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	0.00	0.00	0.00	0.00	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Lunch shuttle system from worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install aerodynamic add-on devices to heavy-duty trucks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce ship cruising speeds in the inner harbor	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low-emission fuels or electrify airport ground service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Engine tuning for marine vessels	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce number of aircraft engines used during idling	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install monitoring system to control airport shuttles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use centralized ground power systems for airport service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
Reduction in Stationary Sources Emissions (Pounds per day)							-9.56	-37.32	-13.62	-0.04	
Reduction in Mobile Sources Emissions (Pounds per day)							-382.82	-27.61	-54.34	-36.09	
Total Reduction in Emissions Based on Newhall Ranch FEIR Measures (Pounds per day)							-392.38	-64.93	-67.96	-36.13	
Percentage Reduced Based on Newhall Ranch FEIR Measures							-6.73%	-3.20%	-11.02%	-5.81%	
No Wood Burning Fire Places or Stoves in Residential Units							-1,784.09	-1,617.41	-18.36	-244.38	
Total Percent Reduction Based on Implementation of All Recommended Measures							-37.45%	-33.03%	-13.99%	-45.11%	
Total Reduced Stationary Source Emissions							11.96	41.52	18.02	0.05	
Total Reduced Mobile Source Emissions							3,622.85	302.40	512.55	341.24	
TOTAL REDUCED EMISSIONS							3,634.81	343.92	530.57	341.29	
SCAQMD Thresholds							550.00	55.00	55.00	150.00	
Project Air Quality Impacts Significant?							YES	YES	YES	YES	

Localized Significance Threshold Analysis for Landmark Village

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May 2006

SUMMARY

The Newhall Land and Farming Company has proposed to build single-family residences, apartment buildings, condominiums, commercial buildings, and recreational areas in the portion of Newhall Ranch called Landmark Village. The Landmark Village project (proposed project) would result in the generation of air pollutants during construction and operational activities. The construction of the utility corridor that provides the infrastructure components, such as potable water, reclaimed water, sewer, and natural gas, is also considered part of the proposed project. This study analyzes the impacts of the construction emissions (fugitive dust and motor vehicle and equipment exhaust) on ambient air quality concentrations in the vicinity of the construction site. The ambient air quality impacts are compared to thresholds established by the South Coast Air Quality Management District (SCAQMD). The significance threshold for respirable particulate matter (PM₁₀) represents compliance with Rule 403 (Fugitive Dust). The thresholds for nitrogen dioxide (NO₂) and carbon monoxide (CO) represent the allowable increase in concentrations above background levels in the vicinity of the project that would not cause or contribute to an exceedance of the relevant ambient air quality standards.

Localized significance threshold analysis shows that maximum 24-hour PM₁₀ would exceed the threshold of significance established by SCAQMD at the nearest residential, workplace, and sensitive receptors to the project site. Also, 1-hour NO₂ concentrations would exceed the threshold of significance established by SCAQMD at the nearest workplace receptors to the project site.

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1.0 GENERAL

1.1 Project Description

The proposed development at Landmark Village is within the South Coast Air Basin (SCAB), which is under the jurisdiction of SCAQMD. The proposed Landmark Village project consists of 308 single-family residential units; 685 condominiums; 451 apartments; 337,600 square feet (sq. ft.) of retail area; 695,400 sq. ft. of office space; 70,000 sq. ft. of school buildings; and 16.1 acres of park area. The construction of the utility corridor that provides the infrastructure components, such as potable water, reclaimed water, sewer, and natural gas, is also considered part of the proposed project. Total development is anticipated to occur over a 251-week period. The construction schedule is mainly divided into three phases (1) grading, (2) asphalt paving, and (3) building construction. Grading and asphalt paving are anticipated to occur during first 75 weeks and the building construction phase is anticipated to occur from week 76 to week 251. The construction of the utility corridor will occur over 52-week period starting in week one along with grading and asphalt paving. The construction of the utility corridor is also divided in three different phases (1) grading, (2) grading and water tanks construction, and (3) grading and water tanks welding and coating. These three phases are anticipated to occur over the first 30 weeks, week 31 to week 48, and week 49 to week 52, respectively. Currently, the project site is either used for agricultural crop production or is vacant, and no demolition is required. The project site is bounded by State Route 126 (SR-126) on the northern boundary and by the Santa Clara River on the southern boundary. Two soil borrow areas are proposed in the vicinity of the northern and southern boundary of the project site.

1.2 Regional Air Quality

The project is located in the SCAB portion of Los Angeles County, which is a severe-17 nonattainment area for the federal 8-hour ozone standard and an extreme nonattainment area for the state 1-hour ozone standard. It has also been designated as a serious nonattainment area for federal 1-hour and 8-hour CO standards and as an attainment area for state 1-hour standard and 8-hour CO standards. Also, it has been designated as a serious nonattainment area for the federal 24-hour and annual PM₁₀ standards and a nonattainment area for the state 24-hour PM₁₀ standard and the state annual fine particulate matter (PM_{2.5}) standard.^{1,2}

¹ California Air Resources Board. "Area Designations (Activities and Maps)." [Online] [February 3, 2006]. <http://www.arb.ca.gov/desig/desig.htm>.

² U.S. Environmental Protection Agency. "Region 9: Air Programs, Air Quality Maps." [Online] [March 17, 2006]. http://www.epa.gov/region9/air/maps/maps_top.html.

1.3 Thresholds of Significance

Table 1, Peak Background Concentrations for SRA 13 for the Period of 2003 to 2005, shows the peak background concentrations of NO₂ and CO in Source Receptor Area (SRA) 13 (Santa Clarita Valley) in which the proposed project is located. These are the values on which LST criteria for NO_x and CO are based.

Table 1
Peak Background Concentrations for SRA 13 for the Period of 2003 to 2005

Pollutant	Averaging Period	Unit	2003	2004	2005	Peak Concentration
Nitrogen Dioxide (NO ₂)	1 hour	ppm	0.12	0.09	0.08	0.12
Carbon Monoxide (CO)	1 hour	ppm	3	5	2	5
	8 hours	ppm	1.7	3.7	1.3	3.7

Source: 1. South Coast Air Quality Management District "Historical Data by Year." [Online] [March 30, 2005], <http://www.aqmd.gov/smog/historicaldata.htm>.
2. U.S. Environmental Protection Agency, AirData: Access to Air Pollution Data [Online] [March 2, 2006], <http://www.epa.gov/air/data/index.html>.

Table 2, Localized Significance Criteria, shows the threshold criteria recommended by the SCAQMD for determining whether the emissions resulting from construction of a development project have the potential to generate significant adverse local impacts on ambient air quality. The SCAQMD's concentration-based PM₁₀ threshold from its *Localized Significance Threshold Methodology (LST Methodology)*³ is a 24-hour average concentration of 10.4 micrograms per cubic meter (µg/m³) based on compliance with Rule 403. The thresholds for NO₂ and CO were based on the maximum concentrations that occurred during the last three years (2003 to 2005) as shown in **Table 1**. These thresholds represent the allowable increase in NO₂ and CO ambient concentrations above current levels that could occur in SRA 13 without causing or contributing to exceedances of the California Ambient Air Quality Standards (CAAQS). For reference, the applicable CAAQS are also shown in **Table 2, Localized Significance Criteria**.

³ South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, June 2003.

Table 2
Localized Significance Criteria

Pollutant	Averaging Period	CAAQS $\mu\text{g}/\text{m}^3$	CAAQS ppm	Peak Conc. in ppm	LST Criteria¹	
Respirable Particulate Matter (PM ₁₀)	24 hours	50	NA	NA	10.4	NA
Nitrogen Dioxide (NO ₂)	1 hour	470	0.25	0.12	244	0.13
Carbon Monoxide (CO)	1 hour	23,000	20	5	17,165	15
	8 hours	10,000	9.0	3.7	6,065	5.3

Source: South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, June 2003.

¹ LST Criteria is the difference between CAAQS and the Peak Concentration.

2.0 EMISSION ESTIMATION METHODOLOGY

Unmitigated construction emissions were estimated based on the information provided in the Software Users' Guide: URBEMIS2002 for Windows with Enhanced Construction Module, Version 8.7.0 (April 2005). URBEMIS2002 is a land use and transportation based air quality model developed in cooperation with the Air Resource Board (ARB) and designed to estimate air emissions from new development projects, including construction emissions. The emissions are estimated based on the information provided by the client. The key emission estimation assumptions are as follows:

Landmark Village

- Anticipated starting year: 2007
- Anticipated development duration: 251 weeks
- Anticipated grading and asphalt paving schedule: week 1 to week 75
- Anticipated construction schedule: week 76 to week 251
- Total number of acres of land to be graded: 291 acres
- Maximum acres graded per day: 28 acres
- Dust control measures: As required by SCAQMD Rule 403

The Utility Corridor

- Anticipated starting year: 2007
- Anticipated development duration: 52 weeks
- Anticipated grading schedule: week 1 to week 30
- Anticipated grading and water tanks construction schedule: week 31 to week 48

- Anticipated grading and water tanks welding and coating schedule: week 49 to week 52
- Total number of acres of land to be graded: 32 acres
- Maximum acres graded per day: 0.12 acres
- Dust control measures: As required by SCAQMD Rule 403

The maximum daily emissions that could occur on the project site from any construction phase were selected for the Localized Significance Thresholds (LST) analysis. The maximum daily emissions for each pollutant may occur during a different subphase (e.g., grading, building construction). **Table 3, Estimated Construction Emissions Associated with the Proposed Project**, shows the estimated construction emissions associated with each proposed project that would occur on the project site.

Table 3
Estimated Construction Emissions Associated with the Proposed Project

Pollutant	Maximum Daily Emissions (pounds per day)	
	Fugitive Dust	Mobile Sources
PM ₁₀ ¹	1,253.84	41.20
NO _x ²	—	2,524.30
CO ²	—	3,184.13

Source: Construction emissions were estimated based on the information provided in the User's Guide [for] URBEMIS2002 for Windows with Enhanced Construction Module (May 2002). Emissions reflect the worst-case scenario (i.e., highest daily emissions associated with the project). The worst-case daily emissions may occur in different project subphases.

¹ Maximum daily PM₁₀ emissions are expected to occur during week 45 to week 48.

² Maximum daily CO and NO_x emissions are expected to occur during week 128.

3.0 LOCALIZED SIGNIFICANCE THRESHOLD ANALYSIS

Per the recommendation of the SCAQMD, ambient PM₁₀, NO₂, and CO concentrations due to the construction of the proposed project were analyzed using methods described in its *LST Methodology*.⁴ The United States Environmental Protection Agency (USEPA)-approved dispersion model Industrial Source Complex – Short Term, ISCST3⁵, was used for the analysis to model the dispersion of the pollutants of concern.

⁴ South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, June 2003.

⁵ Lakes Environmental Software, ISC-AERMOD View (Version 5.1).

3.1 Modeling Approach

The modeling approach is as follows:

- **Sources:** The proposed project site was divided into five, roughly equal-sized areas. This approach was based on the assumption that grading or construction activity would occur on a portion of the overall project site on the day with the worst-case emissions and that the grading or construction activity was equally likely to occur in any of these portions. In order to take maximum area to be graded in one day into account, subareas of 28 acres (the maximum daily acreage in which construction activities would occur, according to the applicant) were created inside each of the main areas in the maximum frequency wind direction (e.g., northwest direction in this case).⁶ Similarly, in order to take construction emissions associated with the utility corridor into account, five areas of 0.12 acres representing the maximum daily emissions associated with the construction of the utility corridor were placed at the closest possible distance from the existing receptors (residential, workplace, or sensitive). Fugitive dust emissions were treated as area sources distributed over the project site. Per the LST methodology, the area sources were given a ground level release height and a 1 meter initial vertical dimension to represent the initial vertical spread of the emissions. Equipment and motor vehicle exhaust emissions of PM₁₀, NO₂, and CO were also modeled as area sources, as the project site is too large to model as a series of volume sources, with a 1 meter initial vertical dimension to represent the initial vertical spread of the emissions and a release height of 5 meters to represent the mid-range of the expected plume rise from frequently used construction equipment during daytime atmospheric conditions.⁷ To simulate the exhaust emissions, elevated area sources with a 5 meter release height and one-meter initial vertical dimension were distributed throughout the five portions of Landmark Village project site.
- **Receptors:** The fenceline receptors were used to determine air quality impacts in the vicinity of the project site. The fenceline receptors were placed at 100 meter intervals from the construction site boundaries to 2000 meters. Also, intermediate receptors were placed at 100 meter intervals throughout the boundary.
- **Meteorology:** Newhall was identified as the nearest meteorological monitoring station for the proposed project. Data were obtained from SCAQMD website.⁸
- **Model Options:** SCAQMD model options were selected (NOCALM, URBAN).

⁶ Maximum frequency wind direction is obtained from windrose diagram for Newhall monitoring station.

⁷ South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, June 2003, p. 2-2.

⁸ Source: South Coast Air Quality Management District Meteorological Data for Dispersion Modeling <http://www.aqmd.gov/smog/metdata/MetDataTable1.html>.

3.2 Modeling Results

3.2.1 Adjustment of NO₂ Impacts

The SCAQMD's *LST Methodology* discusses an adjustment of the NO₂ impacts due to the fact that most of NO_x in the combustion exhaust will occur in the form of nitric oxide (NO), rather than as NO₂. Nitric oxide is converted in the atmosphere through chemical reactions to NO₂. The LST methodology discusses this adjustment as follows:

NO_x emissions are simulated in the air quality dispersion model and the NO₂ conversion rate is treated by a NO₂-to-NO_x ratio, which is a function of downwind distance. Initially, it is assumed that only 5 percent of the emitted NO_x is NO₂. At 5,000 meters downwind, 100 percent conversion of NO-to-NO₂ is assumed.⁹

The following table from the *LST Methodology* demonstrates how the NO₂-to-NO_x ratio varies with distance from the source.

Table 4
NO₂-to-NO_x Ratio as a Function of Downwind Distance

Downwind Distance	NO ₂ /NO _x Ratio
20	0.053
50	0.059
70	0.064
100	0.074
200	0.114
500	0.258
1000	0.467
2000	0.75
3000	0.9
4000	0.978
5000	1.0

Source: South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, June 2003, Table 2-4, p. 2-9.

For this analysis, the distance from the boundary of the project site to the receptor with the highest impact was determined. A NO_x-to-NO₂ ratio was determined from the values in Table 4. Ratios at distances between the values in Table 4 were interpolated. For the proposed project site, the distances between the centers of the sources to the receptors, where the maximum NO₂ concentration was observed

⁹ South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, June 2003, p. 2-8. The NO₂ conversion rates are adapted by the SCAQMD from Arellano, J.V., A.M. Talmon, and P.J.H. Builtjes, "A Chemically Reactive Plume Model for the NO-NO₂-O₃ System," *Atmospheric Environment* 24A, 2237-2246.

were approximately 450 meters, 1,800 meters, and 1,300 meters, respectively. Therefore, a NO_x-to-NO₂ ratio of 0.75, 0.341, and 0.665 (multiplying factor) were applied to the modeled results for the residential, the workplace, and the sensitive receptors, respectively.

3.2.2 Project-Specific Impacts

Table 5, Modeling Results – Maximum Impacts at Residential Receptors, Table 6, Modeling Results – Maximum Impacts at Workplace Receptors, Table 7, Modeling Results – Maximum Impacts at Sensitive Receptors, show the maximum PM₁₀, NO₂, and CO concentrations associated with the proposed project at residential, workplace, and sensitive receptors, respectively. The nearest residential community to the project site is the community of Val Verde located approximately 1.9 kilometers to the north, across SR-126. Other residences are scattered throughout the area, primarily to the north of the site across SR-126. A recreational vehicle park is located to the east of the project site; however, occupants are limited to a 30-day stay. The nearest potential off-site workplace receptors are located to the northeast in the Valencia Commerce Center located approximately 700 meters to the northeast. The nearest sensitive receptors are located approximately 1.7 kilometers to the northeast in the Live Oak Elementary School.

As stated in **Section 3.1**, the project site was divided into five areas. The values shown in these tables are the maximum results associated with the area producing the highest impacts because the activity could occur in any of the areas on any given day.

**Table 5
Modeling Results
Maximum Impacts at Residential Receptors**

Pollutant	Averaging Period	Modeling Results		LST Criteria ¹		Exceeds Threshold?
		µg/m ³	ppm	µg/m ³	ppm	
Respirable Particulate Matter (PM ₁₀)	24 hours	56.08	NA	10.4	NA	YES
Nitrogen Dioxide (NO ₂)	1 hour	404.83	0.22	244	0.13	YES
Carbon Monoxide (CO)	1 hour	680.87	0.59	17,165	15	NO
	8 hours	97.31	0.09	6,065	5.3	NO

Source: Impact Sciences, Inc.

¹ South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, June 2003.

The maximum impacts were observed at the community of Val Verde located approximately 1.9 kilometers to the north, across SR-126.

Table 6
Modeling Results
Maximum Impacts at Workplace Receptors

Pollutant	Averaging Period	Modeling Results		LST Criteria ¹		Exceeds Threshold?
		$\mu\text{g}/\text{m}^3$	ppm	$\mu\text{g}/\text{m}^3$	ppm	
Respirable Particulate Matter (PM ₁₀)	24 hours	60.90	NA	10.4	NA	YES
Nitrogen Dioxide (NO ₂)	1 hour	483.28	0.26	244	0.13	YES
Carbon Monoxide (CO)	1 hour	1787.23	1.56	17,165	15	NO
	8 hours	243.5	0.21	6,065	5.3	NO

Source: Impact Sciences, Inc.

¹ South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, June 2003.
The maximum impacts were observed at the Valencia Commerce Center located approximately 700 meters to the northeast.

Table 7
Modeling Results
Maximum Impacts at Sensitive Receptors

Pollutant	Averaging Period	Modeling Results		LST Criteria ¹		Exceeds Threshold?
		$\mu\text{g}/\text{m}^3$	ppm	$\mu\text{g}/\text{m}^3$	ppm	
Respirable Particulate Matter (PM ₁₀)	24 hours	14.82	NA	10.4	NA	YES
Nitrogen Dioxide (NO ₂)	1 hour	223.90	0.12	244	0.13	NO
Carbon Monoxide (CO)	1 hour	424.65	0.37	17,165	15	NO
	8 hours	53.08	0.05	6,065	5.3	NO

Source: Impact Sciences, Inc.

¹ South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, June 2003.
The maximum impacts were observed at the Live Oak Elementary School located approximately 1.7 kilometers to the northeast.

4.0 CONCLUSIONS

The LST analysis was conducted to estimate worst-case ambient air quality impacts during construction of the Landmark Village project. LST analysis shows that maximum 24-hour PM₁₀ would exceed the threshold of significance established by SCAQMD at the nearest residential, workplace, and sensitive receptors to the project site. Also, 1-hour NO₂ concentrations would exceed the threshold of significance established by SCAQMD at the nearest residential and workplace receptors to the project site.

The impacts suggest that PM₁₀ emissions could exceed the limitations in SCAQMD Rule 403. While the NO₂ concentrations exceed the LST thresholds, the CAAQS would be exceeded only if (1) the actual background concentrations were as high as those on which the LST thresholds are based during the worst-case construction day, (2) the amount of construction activity (e.g., number and types of equipment, hours of operation) assumed in this analysis actually occurred, and (3) the meteorological conditions in the data set used in the dispersion modeling analysis occurred in the vicinity of the project site on the worst-case construction day.

APPENDIX A

Landmark Village Construction Emissions

Estimated Unmitigated Utility Corridor Construction Emissions

Subphase/Emissions Source	Emissions (lbs/day)				
	CO	VOC	NO _x	SO _x	PM ₁₀
Weeks 1 thru 30					
Unmitigated Emissions Total	85.90	11.38	62.83	0	296.80
SCAQMD Thresholds	550	75	100	150	150
Exceeds Thresholds?	NO	NO	NO	NO	YES
Notes: Grading of utility corridor					
Weeks 31 thru 48					
Unmitigated Emissions Total	110.80	14.30	80.34	0	297.42
SCAQMD Thresholds	550	75	100	150	150
Exceeds Thresholds?	NO	NO	NO	NO	YES
Notes: Grading of utility corridor and construction of water tanks					
Weeks 49 thru 52					
Unmitigated Emissions Total	184.25	58.96	152.37	0	300.57
SCAQMD Thresholds	550	75	100	150	150
Exceeds Thresholds?	NO	NO	YES	NO	YES
Notes: Grading of utility corridor and welding and coating of water tanks					

Source: Impact Sciences, Inc.

NEWHALL RANCH SPECIFIC PLAN FINAL EIR AIR QUALITY MITIGATION MEASURES

The following air quality mitigation measures are from the Newhall Ranch Specific Plan Final EIR. These measures, as appropriate, are intended to apply to all future development within Newhall Ranch. Not all of the following measure are appropriate for River Village and comments on the appropriateness of each measure to the River Village project is noted in *italics*.

- 4.10-1. The Specific Plan will provide Commercial and Service uses in close proximity to residential subdivisions.
- 4.10-2. The Specific Plan will locate residential uses in close proximity to Commercial uses, Mixed-Uses, and Business Parks.
- 4.10-3. Bus pull-ins will be constructed throughout the Specific Plan site.
- 4.10-4. Pedestrian facilities, such as sidewalks, and community regional, and local trails, will be provided throughout the Specific Plan site.
- 4.10-5. Roads with adjacent trails for pedestrian and bicycle use will be provided throughout the Specific Plan site connecting the individual Villages and community.
- 4.10-6. The applicant of future subdivisions shall implement all rules and regulations adopted by the Governing Board of the SCAQMD which are applicable to the development of the subdivision (such as Rule 402 - Nuisance, Rule 403 - Fugitive Dust, Rule 1113 - Architectural Coatings) and which are in effect at the time of development. The purpose of Rule 403 is to reduce the amount of particulate matter entrained in the ambient air as a result of man-made fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or man-made condition capable of generating fugitive dust such as the mass and remedial grading associated with the project as well as weed abatement and stockpiling of construction materials (*i.e.*, rock, earth, gravel). Rule 403 requires that grading operations either (1) take actions specified in Tables 1 and 2 of the Rule for each applicable source of fugitive dust and take certain notification and record keeping actions; or (2) obtain an approved Fugitive Dust Control Plan. A complete copy of the SCAQMD's Rule 403 Implementation Handbook, which has been included in Appendix 4.10, provides guideline tables to demonstrate the typical mitigation program and record keeping required for grading operations (Tables 1 and 2 and sample record keeping chart). The record keeping is accomplished by on-site construction personnel, typically the construction superintendent.

Each future subdivision proposed in association with the Newhall Ranch Specific Plan shall implement the following if found applicable and feasible for that subdivision.

GRADING

- a. Apply non-toxic soil stabilizers according to manufacturers' specification to all inactive construction areas (previously graded areas inactive for ten days or more).
- b. Replace groundcover in disturbed areas as quickly as possible.
- c. Enclose, cover, water twice daily, or apply non-toxic soil binders according to manufacturers' specifications, to exposed piles (*i.e.*, gravel, sand, dirt) with 5 percent or greater silt content.
- d. Water active sites at least twice daily.
- e. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.
- f. Monitor for particulate emissions according to District-specified procedures.
- g. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (*i.e.*, minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of CVC Section 23114.

The effectiveness of these measures at reducing PM10 emissions ranges from 7 to 74 percent.¹

¹ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-15 and p. A11-77.

PAVED ROADS

- h. Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water) .
- i. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.

The effectiveness of these measures at reducing PM10 emissions ranges from 25 to 70 percent.²

UNPAVED ROADS

- j. Apply water three times daily, or non-toxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas or unpaved road surfaces.
- k. Reduce traffic speeds on all unpaved roads to 15 mph or less.
- l. Pave construction roads that have a traffic volume of more than 50 daily trips by construction equipment, 150 total daily trips for all vehicles.
- m. Pave all construction access roads at least 100 feet on to the site from the main road.
- n. Pave construction roads that have a daily traffic volume of less than 50 vehicular trips.

The effectiveness of these measures at reducing PM10 emissions ranges from 40 to 92.5 percent.³

- 4.10-7. Prior to the approval of each future subdivision proposed in association with the Newhall Ranch Specific Plan, each of the construction emission reduction measures indicated below (and in Tables 11-2 and 11-3 of the SCAQMD's CEQA *Air Quality Handbook*, as amended) shall be implemented if found applicable and feasible for that subdivision.

ON-ROAD MOBILE SOURCE CONSTRUCTION EMISSIONS:

- a. Configure construction parking to minimize traffic interference. *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.⁴*
- b. Provide temporary traffic controls when construction activities have the potential to disrupt traffic to maintain traffic flow (e.g., signage, flag person, detours) . *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.⁵*
- c. Schedule construction activities that affect traffic flow to off-peak hours (e.g., between 7:00 P.M. and 6:00 A.M. and between 10:00 A.M. and 3:00 P.M.) . *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.⁶*
- d. Develop a trip reduction plan to achieve a 1.5 average vehicle ridership (AVR) for construction employees. *Mitigation not suitable for River Village because SCAQMD Rule 2202 applies to all employers who meet certain criteria for implementing trip reduction measures. The requirement to achieve a specific AVR has been ruled unlawful by the federal government and is no longer recommended.*
- e. Implement a shuttle service to and from retail services and food establishments during lunch hours. *Mitigation not suitable for River Village because construction workers typically take a half-hour lunch at various times of the day and eat on-site food that was either brought by the workers (brown bag) or purchased from mobile caterers who travel to the site.*
- f. Develop a construction traffic management plan that includes the following measures to address construction traffic that has the potential to affect traffic on public streets:
 - Rerouting construction traffic off congested streets *Mitigation not suitable for River Village because the only access to the site is via SR-126 and there are no other roadways on which to reroute traffic.;*
 - Consolidating truck deliveries; and
 - Providing temporary dedicated turn lanes for movement of construction trucks and equipment on and off of the site. *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.⁷*

² South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-15 and pp. A11-77 to -78.

³ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-16 and p. A11-78.

⁴ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

⁵ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

⁶ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

- g. Prohibit truck idling in excess of two minutes. *Mitigation not suitable for River Village because the nature of diesel motors does not lend them to constant turning on and off. Premature wear, and increased air emissions from turning the engines on and off, are common results. It is also extremely difficult to effectively monitor the implementation of this measure on an approximately 700-acre site with contractors who would be concerned about maintaining their equipment. Furthermore, the effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.*⁸

OFF-ROAD MOBILE SOURCE CONSTRUCTION EMISSIONS:

- h. Use methanol-fueled pile drivers. *Any equipment that utilizes an alternative fuel that reduces VOC, NOx, and/or PM10 emissions is advisable. This measure is replaced in the impact analysis with another measure that considers other alternative fuels for diesel-fueled construction equipment.*
- i. Suspend use of all construction equipment operations during second stage smog alerts. *The effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.*⁹
- j. Prevent trucks from idling longer than two minutes. *Mitigation not suitable for River Village because the nature of diesel motors does not lend them to constant turning on and off. Premature wear, and increased air emissions from turning the engines on and off, are common results. It is also extremely difficult to effectively monitor the implementation of this measure on an approximately 700-acre site with contractors who would be concerned about maintaining their equipment. Furthermore, the effectiveness of this measure to reduce VOC emissions is not quantified by SCAQMD.*¹⁰
- k. Use electricity from power poles rather than temporary diesel-powered generators.
- l. Use electricity from power poles rather than temporary gasoline-powered generators.
- m. Use methanol- or natural gas-powered mobile equipment instead of diesel. *Any equipment that utilizes an alternative fuel that reduces VOC, NOx, and/or PM10 emissions is advisable.*
- n. Use propane- or butane-powered on-site mobile equipment instead of gasoline. *Any equipment that utilizes an alternative fuel that reduces VOC, NOx, and/or PM10 emissions is advisable.*

OPERATION IMPACTS

- 4.10-8. The applicant of future subdivisions shall implement all rules and regulations adopted by the Governing Board of the SCAQMD which are applicable to the development of the subdivision (such as Rule 402 - Nuisance, Rule 1102 - Petroleum Solvent Dry Cleaners, Rule 1111 - NOx Emissions from Natural Gas-Fired, Fan-Type Central Furnaces, Rule 1146 - Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters) and which are in effect at the time of occupancy permit issuance.
- 4.10-9. Prior to the approval of each future subdivision proposed in association with the Newhall Ranch Specific Plan, each of the operational emission reduction measures indicated below (and in Tables 11-6 and 11-7 of the SCAQMD's CEQA *Air Quality Handbook*, as amended) shall be implemented if found applicable and feasible for that subdivision.

ON-ROAD MOBILE SOURCE OPERATIONAL EMISSIONS:

RESIDENTIAL USES

- a. Include satellite telecommunications centers in residential subdivisions. *Mitigation not suitable for River Village because satellite telecommunications centers have been superseded by other technology.*
- b. Establish a shuttle service from residential subdivisions to commercial core areas. *Mitigation not suitable for River Village because residential uses are in close proximity and within walking distance to commercial uses proposed within River Village.*
- c. Construct on-site or off-site bus stops (e.g., bus turnouts, passenger benches, and shelters).

⁷ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

⁸ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-13.

⁹ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-14.

¹⁰ South Coast Air Quality Management District, CEQA *Air Quality Handbook* (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-14.

- d. Construct off-site pedestrian facility improvements, such as overpasses and wider sidewalks. *Mitigation not suitable for River Village because no uses adjacent to the River Village site exist within Newhall Ranch to which pedestrian access would be warranted.*
- e. Include retail services within or adjacent to residential subdivisions. *The proposed project is in conformance with this measure.*
- f. Provide shuttles to major rail transit centers or multi-modal stations.
- g. Contribute to regional transit systems (e.g., right-of-way, capital improvements, etc.). *This measure does not directly contribute to reduced air emissions, emission reductions have not been quantified by SCAQMD,¹¹ and it is not given emissions reduction credit in the impact analysis.*
- h. Synchronize traffic lights on streets impacted by development.
- i. Construct, contribute, or dedicate land for the provision of off-site bicycle trails linking the facility to designated bicycle commuting routes.

COMMERCIAL USES

- j. Provide preferential parking spaces for carpools and vanpools and provide 7'2" minimum vertical clearance in parking facilities for vanpool access.
- k. Implement on-site circulation plans in parking lots to reduce vehicle queuing. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.¹²*
- l. Improve traffic flow at drive-thru's by designing separate windows for different functions and by providing temporary parking for orders not immediately available for pickup. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.¹³*
- m. Provide video-conference facilities. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.¹⁴*
- n. Set up resident worker training programs to improve job/housing balance. *Mitigation not suitable for River Village because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site. Furthermore, the effectiveness of this measure to reduce air emissions in the basin lies in actually achieving jobs/housing balance. The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.¹⁵*
- o. Implement home dispatching system where employees receive routing schedule by phone instead of driving to work. *Mitigation not suitable for River Village because it is outside the purview of the project applicant/developer to set up such a system. Such systems are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.*
- p. Develop a program to minimize the use of fleet vehicles during smog alerts (for business not subject to Regulation XV (now Rule 2202) or XII). *Mitigation not suitable for River Village because no commercial retail or office use on the site is expected to use fleet vehicles.*
- q. Use low-emissions fleet vehicles:
 - TLEV
 - ULEV
 - LEV
 - ZEV*Mitigation not suitable for River Village because no commercial retail or office use on the site is expected to use fleet vehicles.*
- r. Reduce employee parking spaces for those businesses subject to Regulation XV (now Rule 2202). *Rule 2202 applies to any employer who employs 250 or more employees on a full or part-time basis at a work site for a consecutive six-month period. It is conceivable that an office use employing as*

¹¹ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-18.

¹² South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

¹³ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-19.

¹⁴ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-19.

¹⁵ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-19.

many as 250 people can locate on the site; therefore, this mitigation measure applies to the River Village project. The requirement to achieve a specific AVR has been ruled unlawful by the federal government and is no longer recommended.¹⁶

- s. Implement a lunch shuttle service from a work site(s) to food establishments. Mitigation not suitable for River Village because Lots within River Village designated for mixed use commercial are expected to have food establishments located within walking distance, thereby not necessitating lunch shuttle service.
- t. Implement compressed work-week schedules where weekly work hours are compressed into fewer than five days.
 - 9/80
 - 4/40
 - 3/36

Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.

- u. Develop a trip reduction plan to achieve 1.5 AVR for businesses with less than 100 employees or multi-tenant work sites. Mitigation not suitable for River Village because SCAQMD Rule 2202 applies to all employers who meet certain criteria for implementing trip reduction measures. The requirement to achieve a specific AVR has been ruled unlawful by the federal government and is no longer recommended.
- v. Utilize satellite offices rather than regular work site to reduce VMT. Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.
- w. Establish a home-based telecommuting program. Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.
- x. Provide on-site child care and after-school facilities or contribute to off-site development within walking distance. Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site.
- y. Require retail facilities or special event centers to offer travel incentives such as discounts on purchases for transit riders. Mitigation not suitable for the River Village applicant/developer because it is outside the purview of the project applicant/developer to set up such a program. Such programs are more appropriately set up by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site. Such a program to reduce air emissions in the Basin is not quantified by the SCAQMD and it is not given emission reduction credit in this impact analysis.¹⁷
- z. Provide on-site employee services such as cafeterias, banks, etc.
- aa. Establish a shuttle service from residential core areas to the work site. Mitigation not suitable for River Village because residential uses are proposed in close proximity and within walking distance to commercial uses proposed within River Village.
- ab. Construct on-site or off-site bus stops (e.g., bus turnouts, passenger benches, and shelters).
- ac. Implement a pricing structure for single-occupancy employee parking and/or provide discounts to ridesharers.
- ad. Include residential units within a commercial project.
- ae. Utilize parking in excess of code requirements as on-site park-n-ride lots or contribute to construction of off-site lots.

¹⁶ In 1988, the SCAQMD instituted Regulation XV that required enterprises with 100 or more employees to adopt trip reduction programs. The regulation required each employer to institute a trip reduction program that would achieve an Average Vehicle Ridership (AVR) of 1.75 in Downtown Los Angeles, 1.5 in the remainder of urbanized areas, and 1.3 in rural parts of the District. AVR measures the extent to which commuters use public transit, car pooling, and other multiple-occupant-vehicle modes of transportation. Regulation XV was repealed in December, 1995 and was replaced with Rule 2202 which provides options for employers to either continue trip reduction programs or reduce mobile source emissions through other strategies. As of January 1, 1997 Rule 2202 applies only to enterprises with 250 or more employees.

¹⁷ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-20.

- af. Any two of the following:
 - Construct off-site bicycle facility improvements, such as bicycle trails linking the facility to designated bicycle commuting routes, or on-site improvements, such as bicycle paths.
 - Include bicycle parking facilities, such as bicycle lockers and racks.
 - Include showers for bicycling employees' use.
- ag. Any two of the following:
 - Construct off-site pedestrian facility improvements, such as overpasses, wider sidewalks.
 - Construct on-site pedestrian facility improvements, such as building access which is physically separated from street and parking lot traffic and walk paths.
 - Include showers for pedestrian employees' use.
- ah. Provide shuttles to major rail transit stations and multi-modal centers.
- ai. Contribute to regional transit systems (e.g., right-of-way, capital improvements, etc.) . *This measure does not directly contribute to reduced air emissions, emission reductions have not been quantified,¹⁸ and it is not given emissions reduction credit in the impact analysis.¹⁹*
- aj. Charge visitors to park. *Mitigation not suitable for River Village because charging visitors to park at retail establishments would discourage patronage. Charging visitors to park at the office uses would encourage patrons to park in retail parking spaces or on the street. Charging visitors to pay for parking at the park site would encourage on-street parking.*
- ak. Synchronize traffic lights on streets impacted by development.
- al. Reschedule truck deliveries and pickups to off-peak hours. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.²⁰*
- am. Set up paid parking systems where drivers pay at walkup kiosk and exit via a stamped ticket to reduce emissions from queuing vehicles. *Mitigation not suitable for River Village because charging visitors to park at retail establishments would discourage patronage. Charging visitors to park at the office uses would encourage patrons to park in retail parking spaces or on the street. Charging visitors to pay for parking at the park site would encourage on-street parking. The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.²¹*
- an. Require on-site truck loading zones. *The effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.²²*
- ao. Implement or contribute to public outreach programs. *Mitigation not suitable for the River Village applicant/developer because it is unclear as to what type of outreach program this mitigation measure refers. Furthermore, it is outside the purview of the project applicant/developer to set up such programs. Such programs are more appropriately set up and maintained by and at the discretion of future occupants of the commercial retail and office uses that will locate on the site. Furthermore, the effectiveness of this measure is not quantified by SCAQMD and is not given emission reduction credit in the impact analysis.²³*
- ap. Require employers not subject to Regulation XV (now Rule 2202) to provide commuter information area.

BUSINESS PARK USES

No Business Park uses are proposed within the River Village project.

- aq. Provide preferential parking spaces for carpools and vanpools and provide 7'2" minimum vertical clearance in parking facilities for vanpool access.
- ar. Implement on-site circulation plans in parking lots to reduce vehicle queuing.
- as. Set up resident worker training programs to improve job/housing balance.

¹⁸ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-18.

¹⁹ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

²⁰ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

²¹ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

²² South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

²³ South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993), p. 11-22.

- bx. Use energy-efficient low-sodium parking lot lights.

COMMERCIAL USES

- by. Use lighting controls and energy-efficient lighting.
- bz. Use fuel cells in residential subdivisions to produce heat and electricity.
- ca. Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting).
- cb. Use light-colored roofing materials to reflect heat.
- cc. Increase walls and attic insulation beyond Title 24 requirements.
- cd. Use solar or low emission water heaters.
- ce. Use central water heating systems.
- cf. Provide shade trees to reduce building heating/cooling needs.
- cg. Use energy-efficient and automated controls for air conditioners.
- ch. Use double-paned windows.
- ci. Use energy-efficient low-sodium parking lot lights.
- cj. Use lighting controls and energy-efficient lighting.
- ck. Use light-colored roofing materials to reflect heat.
- cl. Increase walls and attic insulation beyond Title 24 requirements.
- cm. Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting).

BUSINESS PARK USES

No Business Park uses are proposed within the River Village project.

- cn. Provide shade trees to reduce building heating/cooling needs.
- co. Use energy-efficient and automated controls for air conditioning.
- cp. Use double-paned windows.
- cq. Use energy-efficient low-sodium parking lot lights.
- cr. Use lighting controls and energy-efficient lighting.
- cs. Use light-colored roofing materials to reflect heat.
- ct. Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting).
- cu. Increase walls and attic insulation beyond Title 24 requirements.
- cv. Improved storage and handling of source materials.
- cw. Materials substitution (e.g., use water-based paints, life-cycle analysis).
- cx. Modify manufacturing processes (e.g., reduce process stages, closed-loop systems, materials recycling).
- cy. Resource recovery systems that redirect chemicals to new production processes.

- 4.10-10. All non-residential development of 25,000 gross square feet or more shall comply with the County's Transportation Demand Management (TDM) Ordinance (Ordinance No. 93-0028M) in effect at the time of subdivision. The sizes and configurations of the Specific Plan's non-residential uses are not known at this time and the Ordinance specifies different requirements based on the size of the project under review. All current provisions of the ordinance are summarized in Appendix 4.10.
- 4.10-11. Subdivisions and buildings shall comply with Title 24 of the California Code of Regulations which are current at the time of development.
- 4.10-12. Lighting for public streets, parking areas, and recreation areas shall utilize energy efficient light and mechanical, computerized or photo cell switching devices to reduce unnecessary energy usage.
- 4.10-13. Any on-site subterranean parking structures shall provide adequate ventilation systems to disperse pollutants and preclude the potential for a pollutant concentration to occur. *Mitigation not suitable for River Village because no subterranean parking structures are proposed within the project. Furthermore, this measure reduces indoor air pollutants, but does not effectively reduce air emissions within the Basin.*

- 4.10-14. The sellers of new residential units shall be required to distribute brochures and other relevant information published by the SCAQMD or similar organization to new homeowners regarding the importance of reducing vehicle miles traveled and related air quality impacts, as well as on local opportunities for public transit and ridesharing.

UNMITIGATED CONSTRUCTION EMISSIONS

Project Name River Village Unmitigated Emissions
 Subphase Weeks 1 thru 19
 Length of Subphase (weeks) 19.00
 Year 2006
 Total Acreage 120.28

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	130.69	182.74	18.98	1.69	19,407.42	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	130.69	182.74	18.98	1.69	5.36		
Off-Road Diesel Exhaust	130.69	182.74	18.98	1.69	65.65		
Worker Commute Trips	13.48	1.71	2.90	0.02	0.11		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	9,703.71	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Architectural Painting							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	1,987.28	410.56	1,543.43	1.72	9,772.76		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	Yes		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 20 thru 39
 Length of Subphase (weeks) 20.00
 Year 2006
 Total Acreage 126.61

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
FugitiveDust	130.69	182.74	18.98	1.69	19,393.70	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	—	65.65		
Off-Road Diesel Exhaust	15.38	1.71	2.90	0.02	0.31		
Worker Commute Trips	—	—	—	—	9,696.85		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	1,332.30	167.28	1,176.24	—	46.72	Fugitive Dust Rule 403	
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11		
On-Road Diesel Exhaust Emissions	23.98	2.36	12.29	0.14	0.28		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Architectural Painting							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	Fugitive Dust Rule 403	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	Yes		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 40 thru 46
 Length of Subphase (weeks) 7.00
 Year 2006
 Total Acreage 44.31

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust					0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust					15,407.43	Fugitive Dust Rule 403
On-Road Diesel Exhaust	130.69	182.74	18.98	1.69	3.30	
Off-Road Diesel Exhaust	1,841.01	226.11	1,521.55		65.65	
Worker Commute Trips	15.58	1.71	2.90	0.02	0.11	
Mitigation/Reduction						
Fugitive Dust					9,703.71	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions		1.01				Fugitive Dust Rule 403
Off-Road Diesel Exhaust Emissions	1,352.50	167.28	1,126.24		46.72	
On-Road Diesel Exhaust Emissions	4.44	0.63	6.21	0.06	0.11	
Worker Commute Emissions	12.27	1.35	2.28	0.02	0.09	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	227.74	1,654.08		72.90	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions		151.01				
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	5,089.89	960.19	4,341.75	1.86	9,892.94	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 47 thru 91
 Length of Subphase (weeks) 45.00
 Year 2006
 Total Acreage

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	-	-	-	-	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	-	-	-	-	-	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	-	-	-	-	21.98	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	-	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	-	-	-	-	-	
Fugitive Dust	-	-	-	-	10.99	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	-	1.01	-	-	-	
Off-Road Diesel Exhaust Emissions	1,382.30	187.28	1,126.24	-	46.72	
On-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
Worker Commute Emissions	12.27	1.35	2.28	0.02	0.09	
Mitigation/Reduction	-	-	-	-	-	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	222.74	1,634.08	-	72.90	
Worker Commute Trips	25.31	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions	-	151.01	-	-	-	
Worker Commute Trips	25.31	2.80	4.75	0.04	0.18	
Mitigation/Reduction	-	-	-	-	-	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	3,102.61	549.63	2,798.32	0.15	131.16	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Week 92
 Length of Subphase (weeks) 1.00
 Year 2007
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	1,379.05	1.01	1,082.87	0.01	31.93		
Off-Road Diesel Exhaust Emissions	4.03	0.61	5.89	0.01	0.10		
On-Road Diesel Exhaust Emissions	11.29	1.25	2.11	0.01	0.08		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	2,159.16	275.61	1,931.00	0.02	79.99		
Worker Commute Trips	28.13	3.11	5.26	0.02	0.21		
Architectural Painting							
Off-Gas Emissions	151.50	1.01	1,082.87	0.01	31.93		
Worker Commute Trips	28.13	3.11	5.26	0.02	0.21		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	3,603.81	603.46	3,035.29	0.06	122.52		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 93 thru 144
 Length of Subphase (weeks) 52.00
 Year 2007
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust					0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Grading Subphase							
Fugitive Dust	--	--	--	--	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	--	--	--	--	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	--	0.02	--	--	--		
Off-Road Diesel Exhaust Emissions	1,373.05	167.28	1,885.87	--	41.93		
On-Road Diesel Exhaust Emissions	0.08	0.01	0.11	0.00	0.00		
Worker Commute Emissions	11.29	1.25	2.11	0.01	0.08		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,872.07	240.07	1,693.53	--	70.48		
Worker Commute Trips	24.90	2.75	4.63	0.02	0.18		
Architectural Painting							
Off-Gas Emissions	--	144.73	--	--	--		
Worker Commute Trips	24.90	2.75	4.63	0.02	0.18		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Net Emission Totals:	3,306.30	555.86	2,790.95	0.05	112.86		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 145 thru 158
 Length of Subphase (weeks) 14.00
 Year 2008
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Paving and Asphalt Subphase						
Paving Off-Gas Emissions	1,385.56	167.28	1,058.33	38.46	0.10	
Off-Road Diesel Exhaust Emissions	3.70	0.57	5.39	0.01	0.08	
On-Road Diesel Exhaust Emissions	10.38	1.15	1.93	0.01	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,685.60	212.51	1,433.80	58.55	0.17	
Worker Commute Trips	20.77	2.30	3.89	0.02	0.12	
Architectural Painting						
Off-Gas Emissions	141.66	1.15	1.93	0.01	0.00	
Worker Commute Trips	20.77	2.30	3.89	0.02	0.12	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	3,126.78	528.79	2,527.25	0.05	97.52	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 159 thru 178
 Length of Subphase (weeks) 21.00
 Year 2009
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Grading Subphase							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Building Construction and Architectural Coatings Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	1,726.62	212.51	1,394.94	0.03	53.47		
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17		
Architectural Painting							
Off-Gas Emissions	141.56	17.69	1,394.94	0.03	53.47		
Worker Commute Trips	19.09	2.13	3.58	0.02	0.17		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	1,764.79	232.33	1,402.06	0.03	53.60		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

Project Name River Village Unmitigated Emissions
 Subphase Weeks 179 thru 196
 Length of Subphase (weeks) 18.00
 Year 2009
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,515.09	187.20	1,239.14	0.03	48.23	
Worker Commute Trips	17.12	1.91	3.21	0.02	0.15	
Architectural Painting						
Off-Gas Emissions	141.24	1.91	3.21	0.02	0.15	
Worker Commute Trips	17.12	1.91	3.21	0.02	0.15	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	1,549.32	332.26	1,245.55	0.03	48.53	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 197 thru 210
 Length of Subphase (weeks) 13.00
 Year 2009
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Paving and Asphalt During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Paving and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Paving and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,041.33	128.61	880.48	0.02	33.06	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Architectural Painting						
Off-Gas Emissions	87.64					
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	1,064.36	218.82	884.79	0.02	33.26	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 211 thru 220
 Length of Subphase (weeks) 10.00
 Year 2010
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	779.57	95.89	596.66	0.01	21.89	
Worker Commute Trips	7.50	0.64	1.39	0.01	0.07	
Architectural Painting						
Off-Gas Emissions	779.57	95.89	596.66	0.01	21.89	
Worker Commute Trips	7.50	0.64	1.39	0.01	0.07	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	794.57	134.83	596.44	0.01	22.03	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	No	

Project Name River Village Unmitigated Emissions
 Subphase Weeks 221 thru 235
 Length of Subphase (weeks) 15.00
 Year 2010
 Total Acreage

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00		
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	491.65	59.17	372.96	0.00	13.54		
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04		
Architectural Painting							
Off-Gas Emissions	0.00	11.78	0.00	0.00	0.00		
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:							
SCAQMD Threshold:							
Exceeds Threshold?							

River Village Office Construction Only Unmitigated Emissions

Weeks of Construction: 140

Year Constr. Begins: 2015

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation	
	CO	ROG	NOx	SOx	PM10		
Demolition Subphase							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Grading Subphase							
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Fugitive Dust	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Pavement and Asphalt Subphase							
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase	
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Mitigation/Reduction							
Building Construction and Architectural Coatings Subphase							
Building Construction							
Off-Road Diesel Exhaust	894.12	106.21	663.11	-	23.88		
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08		
Architectural Painting							
Off-Gas Emissions	-	38.48	-	-	-		
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08		
Mitigation/Reduction							
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00		
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00		
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00		
Net Emission Totals:	905.93	147.09	669.17	0.03	24.03		
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00		
Exceeds Threshold?	Yes	Yes	Yes	No	No		

MITIGATED CONSTRUCTION EMISSIONS

Project Name River Village Mitigated Emissions
 Subphase Weeks 1 thru 19
 Length of Subphase (weeks) 19.00
 Year 2006

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	130.69	182.74	18.98	1.69	19,407.42	Water Exposed Surfaces Three Times Daily Assumes Use of Aqueous Fuel, Cooled Exhaust Gas Recirculation Assumes Use of Aqueous Fuel, Cooled Exhaust Gas Recirculation No Feasible Mitigation Available
On-Road Diesel Exhaust	1,841.01	226.11	1,521.55	0.00	65.65	
Off-Road Diesel Exhaust	15.58	1.71	2.90	0.02	0.11	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	1.69	2.64	
On-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	97.16	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	No Building Construction During This Subphase
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	330.37	207.06	721.79	0.02	9,672.96	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
Subphase Weeks 20 thru 39
Length of Subphase (weeks) 20.00
Year 2006

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust					0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust					19,393.79	
On-Road Diesel Exhaust	130.69	182.74	18.98	1.69	3.30	
Off-Road Diesel Exhaust	1,841.01	226.11	1,521.55	--	65.65	
Worker Commute Trips	15.58	1.71	2.90	0.02	0.11	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	9,696.85	Water Exposed Surfaces Three Times Daily
On-Road Diesel Exhaust	0.00	0.00	0.00	1.69	2.64	Aqueous Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	97.16	Aqueous Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions		1.01		--	--	
Off-Road Diesel Exhaust Emissions	1,352.59	167.28	1,126.24	--	46.72	
On-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
Worker Commute Emissions	23.98	2.86	12.29	0.11	0.28	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	None Available
On-Road Diesel Exhaust	4.00	0.58	3.35	0.06	0.09	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						No Building Construction During This Subphase
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting						
Off-Gas Emissions	--	0.00	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	490.05	227.72	1,255.02	0.13	9,643.99	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
 Subphase Weeks 40 thru 46
 Length of Subphase (weeks) 7.00
 Year 2006

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	130.69	182.74	18.98	1.69	19,402.42	Water Exposed Surfaces Three Times Daily
On-Road Diesel Exhaust	1,841.61	226.11	1,521.53	1.69	3.30	
Off-Road Diesel Exhaust	15.38	1.71	2.90	0.02	0.11	
Worker Commute Trips						
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	1.69	9,703.71	Aqueous Fuel, Cooled Exhaust Gas Recirculation
On-Road Diesel Exhaust	1,656.91	203.50	821.64	n/a	2.64	Aqueous Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	97.16	Aqueous Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips					0.00	No Feasible Mitigation Available
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,352.50	167.28	1,126.24	0.06	46.72	None Available
Off-Road Diesel Exhaust Emissions	4.44	0.65	6.21	0.06	0.11	
On-Road Diesel Exhaust Emissions	12.27	1.35	2.28	0.02	0.09	
Worker Commute Emissions						
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	4.00	0.38	3.35	0.06	0.09	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,682.38	222.74	1,654.08	0.00	72.90	
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions		151.03				
Worker Commute Trips	25.51	2.80	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,514.14	200.47	893.20	0.00	107.89	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Gas Emissions		n/a				No Mitigation Available
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Net Emission Totals:	697.89	405.10	2,015.39	0.11	9,616.01	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	Yes	Yes	Yes	No	Yes	

Project Name River Village Mitigated Emissions
 Subphase Weeks 47 thru 91
 Length of Subphase (weeks) 45.00
 Year 2006

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	--	--	--	--	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
Fugitive Dust	--	--	--	--	21.98	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	10.99	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	--	1.01	--	--	--	
Off-Road Diesel Exhaust Emissions	1,332.50	167.28	1,126.24	--	46.72	
On-Road Diesel Exhaust Emissions	4.49	0.65	6.23	0.06	0.13	
Worker Commute Emissions	12.27	1.35	2.28	0.02	0.09	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	None Available
On-Road Diesel Exhaust	4.00	0.58	3.35	0.06	0.09	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,217.25	150.55	608.17	n/a	69.15	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,682.38	222.74	1,654.08	--	72.90	
Worker Commute Trips	25.51	2.90	4.75	0.04	0.18	
Architectural Painting						
Off-Gas Emissions	--	151.01	--	--	--	
Worker Commute Trips	25.51	2.90	4.75	0.04	0.18	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,514.14	200.47	893.20	0.00	107.89	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	367.22	198.03	1,293.59	0.09	-45.97	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	No Feasible Mitigation Available

Project Name River Village Mitigated Emissions
Subphase Week 92
Length of Subphase (weeks) 1.00
Year 2007

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,373.05	167.28	1,085.87	41.93	41.93	None Available
Off-Road Diesel Exhaust Emissions	4.05	0.61	5.80	0.01	0.10	
On-Road Diesel Exhaust Emissions	11.29	1.25	2.11	0.01	0.08	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	3.63	0.54	3.13	0.01	0.08	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
On-Road Diesel Exhaust	1,235.75	150.55	586.37	n/a	62.06	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	2,159.16	275.61	1,931.00	79.99	79.99	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	28.13	3.11	5.26	0.02	0.21	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	28.13	3.11	5.26	0.02	0.21	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Gas Emissions	1,943.24	248.05	1,642.74	0.00	118.39	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:						
SCAQMD Threshold:	421.17	204.32	1,403.05	0.05	58.00	
Exceeds Threshold?	850.00	75.00	100.00	150.00	150.00	
	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 93 thru 144
Length of Subphase (weeks) 52.00
Year 2007

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,373.05	167.28	1,085.87	41.94		None Available
Off-Road Diesel Exhaust Emissions	0.08	0.01	0.11	0.00	0.00	
On-Road Diesel Exhaust Emissions	11.29	1.25	2.41	0.01	0.08	
Worker Commute Emissions						
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
On-Road Diesel Exhaust	0.07	0.01	0.06	0.00	0.00	
Off-Road Diesel Exhaust	1,235.75	150.55	586.37	n/a	62.06	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,872.07	240.07	1,693.33	70.48		
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18	
Architectural Painting						
Off-Gas Emissions	141.73					
Worker Commute Trips	24.90	2.75	4.65	0.02	0.18	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,684.86	216.06	914.52	0.00	104.31	
Off-Gas Emissions		n/a				
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	385.62	189.23	1,290.00	0.05	-53.50	No Mitigation Available
SCAQMD Threshold:	550.00	75.00	190.00	150.00	150.00	No Feasible Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
 Subphase Weeks 145 thru 158
 Length of Subphase (weeks) 14.00
 Year 2008

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	1,385.56	167.28	1,058.35	0.01	38.46	None Available
Off-Road Diesel Exhaust Emissions	3.70	0.57	5.39	0.01	0.10	
On-Road Diesel Exhaust Emissions	10.38	1.15	1.94	0.01	0.08	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	3.33	0.51	2.91	0.01	0.08	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,247.00	150.55	571.51	n/a	56.92	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Road Diesel Exhaust	1,685.60	212.51	1,453.90	0.02	58.55	
Worker Commute Trips	20.77	2.30	3.89	0.02	0.17	
Architectural Painting						
Off-Gas Emissions	0.00	141.66	0.00	0.00	0.00	
Worker Commute Trips	20.77	2.30	3.89	0.02	0.17	
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,517.04	191.26	785.05	0.00	86.65	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	No Mitigation Available
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	No Feasible Mitigation Available
Net Emission Totals:	359.40	186.46	1,167.78	0.04	-46.13	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 159 thru 178
Length of Subphase (weeks) 21.00
Year 2009

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	1,726.62	212.31	1,394.91	0.00	53.47	
Worker Commute Trips	19.09	2.13	3.38	0.02	0.17	
Architectural Painting						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	19.09	2.13	3.38	0.02	0.17	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation
Mitigation/Reduction						
Off-Road Diesel Exhaust	1,553.96	191.26	753.25	0.00	79.14	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	210.84	167.17	648.81	0.03	-25.33	No Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	No Feasible Mitigation Available
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 179 thru 196
Length of Subphase (weeks) 18.00
Year 2009

Calculated Emissions
Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	1,515.09	187.20	1,239.14	0.02	48.23	
Off-Road Diesel Exhaust	17.12	1.91	3.21	0.02	0.15	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Architectural Painting	1,515.09	187.20	1,239.14	0.02	48.23	
Off-Gas Emissions	17.12	1.91	3.21	0.02	0.15	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	1,363.58	168.48	669.14	0.00	71.38	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	185.74	163.78	576.42	0.03	-22.85	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	Yes	No	No	

Project Name River Village Mitigated Emissions
Subphase Weeks 197 thru 210
Length of Subphase (weeks) 13.00
Year 2009

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust					0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	--	--	--	--	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	--	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	--	--	--	--	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions		0.00		--	--	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	--	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Architectural Painting						
Off-Gas Emissions	--	67.64	--	--	--	
Worker Commute Trips	11.51	1.29	2.16	0.01	0.10	
Mitigation/Reduction						
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	23.03	90.21	4.31	0.02	0.20	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	Yes	No	No	No	

Project Name River Village Mitigated Emissions
 Subphase Weeks 211 thru 220
 Length of Subphase (weeks) 10.00
 Year 2010

Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07	
Architectural Painting	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	7.50	0.84	1.39	0.01	0.07	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	15.00	40.94	2.78	0.01	0.14	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	No	No	No	

Project Name River Village Mitigated Emissions
 Subphase Weeks 221 thru 235
 Length of Subphase (weeks) 15.00
 Year 2010

 Calculated Emissions
 Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
FugitiveDust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	n/a	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction	491.65	59.17	372.96	0.01	13.64	Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Off-Road Diesel Exhaust	4.44	0.50	0.82	0.00	0.04	
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04	
Architectural Painting	4.44	0.50	0.82	0.00	0.04	
Off-Gas Emissions	4.44	0.50	0.82	0.00	0.04	
Worker Commute Trips	4.44	0.50	0.82	0.00	0.04	
Mitigation/Reduction	4.44	0.50	0.82	0.00	0.04	
Off-Road Diesel Exhaust	442.49	53.25	201.40	0.00	20.19	
Off-Gas Emissions	0.00	n/a	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	58.05	18.70	173.21	0.01	-6.46	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	Yes	No	No	

River Village Office Construction Only Mitigated Emissions

Weeks of Construction: 140

Year Constr. Begins: 2015

	Calculated Emissions
	Mitigated Emissions

Emissions Source/Subphase	Emissions (Pounds per Day)					Mitigation
	CO	ROG	NOx	SOx	PM10	
Demolition Subphase						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	No Demolition During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Demolition Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Grading Subphase						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	No Grading During This Subphase
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Pavement and Asphalt Subphase						
Paving Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	No Pavement and Asphalt During This Subphase
Off-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust Emissions	0.00	0.00	0.00	0.00	0.00	
Worker Commute Emissions	0.00	0.00	0.00	0.00	0.00	
Mitigation/Reduction						
Off-Gas Emissions	0.00	0.00	0.00	0.00	0.00	
On-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Off-Road Diesel Exhaust	0.00	0.00	0.00	0.00	0.00	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Building Construction and Architectural Coatings Subphase						
Building Construction						Aqueous Diesel Fuel, Cooled Exhaust Gas Recirculation No Mitigation Available No Feasible Mitigation Available
Off-Road Diesel Exhaust	884.12	106.21	665.11	--	23.88	
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08	
Architectural Painting						
Off-Gas Emissions	--	38.48	--	--	--	
Worker Commute Trips	10.90	1.20	2.03	0.02	0.08	
Mitigation/Reduction						
Off-Road Diesel Exhaust	795.71	95.59	359.16	0.00	35.34	
Off-Gas Emissions	--	n/a	--	--	--	
Worker Commute Trips	0.00	0.00	0.00	0.00	0.00	
Net Emission Totals:	110.22	51.50	316.01	0.03	-11.31	
SCAQMD Threshold:	550.00	75.00	100.00	150.00	150.00	
Exceeds Threshold?	No	No	Yes	No	No	

URBEMIS2002
UNMITIGATED OPERATIONAL EMISSIONS
SUMMERTIME

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	78.83	31.65	21.52	0.17	0.08
TOTALS (lbs/day, mitigated)	77.29	26.13	10.61	0.00	0.05

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	342.42	391.84	4,155.89	2.47	377.33
TOTALS (lbs/day, mitigated)	342.41	391.82	4,155.68	2.47	377.31

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	421.25	423.49	4,177.40	2.65	377.40
TOTALS (lbs/day, mitigated)	419.69	417.94	4,166.29	2.47	377.36

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	2.40	31.52	13.20	-	0.06
Wood Stoves - No summer emissions					
Fireplaces - No summer emissions					
Landscaping	0.97	0.13	8.32	0.17	0.02
Consumer Prdcts	75.46	-	-	-	-
TOTALS (lbs/day, unmitigated)	78.83	31.65	21.52	0.17	0.08

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	56.31	60.90	669.83	0.39	59.43
Apartments low rise	32.54	32.68	359.42	0.21	31.89
Condo/townhouse general	31.93	33.14	364.51	0.21	32.34
Elementary school	20.51	10.98	116.55	0.07	10.66
City park	0.71	0.49	5.16	0.00	0.47
Commercial Center 10-30 ac	91.46	120.96	1,259.13	0.76	115.66
Commercial Center <10 ac.	42.72	57.47	598.28	0.36	54.96
Commercial Shops	2.41	3.13	32.54	0.02	2.99
Commercial Office	63.82	72.09	750.48	0.45	68.94
TOTAL EMISSIONS (lbs/day)	342.42	391.84	4,155.89	2.47	377.33

Does not include correction for passby trips.
Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.90 trips / dwelling units	591.00	5,850.90
Apartments low rise	6.90 trips / dwelling units	455.00	3,139.50
Condo/townhouse general	8.00 trips / dwelling units	398.00	3,184.00
Elementary school	1.45 trips / students	750.00	1,087.50
City park	2.60 trips / acres	20.90	54.34
Commercial Center 10-30 ac	54.06 trips / 1000 sq. ft.	252.00	13,623.12
Commercial Center <10 ac.	85.06 trips / 1000 sq. ft.	76.10	6,473.07
Commercial Shops	37.06 trips / 1000 sq. ft.	9.50	352.07
Commercial Office	11.56 trips / 1000 sq. ft.	702.40	8,119.74

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
City park				5.0	2.5	92.5
Commercial Center 10-30 ac.				2.0	1.0	97.0
Commercial Center <10 ac.				2.0	1.0	97.0
Commercial Shops				2.0	1.0	97.0
Commercial Office				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The area source mitigation measure option switch changed from off to on.
The natural gas residential percentage changed from 60 to 100.
The percentage of wood stoves changed from 35 to 0.
The landscape length of the summer period (in days) changed from 180 to 365.
The landscape year changed from 2004 to 2007.
The consumer product persons per residential unit changed from 2.861 to 3.056.
Mitigation measure Orient Buildings North/South: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Rsdntl Lndscp Maint.
has been changed from off to on.
Mitigation measure Central Water Heater: Cmrc1 Space Heat.
has been changed from off to on.
Mitigation measure Orient Buildings North/South: Cmrc1 Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Cmrc1 Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Cmrc1 Lndscp Maint.
has been changed from off to on.

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2007.
The double counting internal work trip limit changed from to 791.577.
The double counting shopping trip limit changed from to 395.7885.
The double counting other trip limit changed from to 5234.992.
The travel mode environment settings changed from both to: both
Mitigation measure Mixed Use Project (Residential Oriented):3
has been changed from off to on.
Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1
has been changed from off to on.
Mitigation measure Provide Direct Pedestrian Connections:1
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety:0.5
has been changed from off to on.
Mitigation measure Provide Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Signalization and Signage:0.5
has been changed from off to on.
Mitigation measure Mixed Use Project (Commercial Oriented):1
has been changed from off to on.
Mitigation measure Floor Area Ratio 0.75 or Greater:1
has been changed from off to on.
Mitigation measure Provide Wide Sidewalks and Onsite Pedestrian Facilities:1
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Project Provides Shade Trees to Shade Sidewalks:0.5
has been changed from off to on.
Mitigation measure Project Provides Street Art and/or Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety Designs/Infrastructure at Crossings:0.5
has been changed from off to on.
Mitigation measure Articulated Storefront(s) Display Windows with Visual Interest:0.25
has been changed from off to on.
Mitigation measure No Long Uninterrupted Walls Along Pedestrian Walkways:0.25
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Secure Bicycle Parking:1
has been changed from off to on.
Mitigation measure Provide Employee Lockers and Showers:1
has been changed from off to on.
Mitigation measure Shuttle Bus Service to Transit/Multi-Modal Center:2
has been changed from off to on.
Mitigation measure Preferential Carpool/Vanpool Parking:1.5
has been changed from off to on.
Mitigation measure Many Frequently Needed Services Provided:5

has been changed from off to on.
Mitigation measuremitop5: Park and Ride Lots
has been changed from on to off.

URBEMIS2002
UNMITIGATED OPERATIONAL EMISSIONS
WINTERTIME

URBEMIS 2002 For Windows 7.5.0

File Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 Project Name: River Village Operational Emissions
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	1,695.26	49.89	1,797.29	2.83	244.44
TOTALS (lbs/day, mitigated)	1,694.70	44.49	1,794.71	2.83	244.43

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	330.01	566.89	4,005.67	2.01	377.33
TOTALS (lbs/day, mitigated)	330.00	566.86	4,005.48	2.01	377.31

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	2,025.28	616.78	5,802.96	4.83	621.77
TOTALS (lbs/day, mitigated)	2,024.69	611.36	5,800.19	4.83	621.74

URBEMIS 2002 For Windows 7.5.0

ile Name: C:\URBEMIS2002\URBEMIS River Village\River Village Operational Emissions.urb
 roject Name: River Village Operational Emissions
 roject Location: South Coast Air Basin (Los Angeles area)
 n-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Winter)

REA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)					
Source	ROG	NOx	CO	SO2	PM10
Natural Gas	2.40	31.52	13.20	-	0.06
Wood Stoves	0.00	0.00	0.00	0.00	0.00
Fireplaces	1,617.41	18.36	1,784.09	2.83	244.38
Landscaping - No winter emissions					
Consumer Prdcts	75.46	-	-	-	-
TOTALS(lbs/day,unmitigated)	1,695.26	49.89	1,797.29	2.83	244.44

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	52.80	88.27	633.57	0.32	59.43
Apartments low rise	28.40	47.36	339.97	0.17	31.89
Condo/townhouse general	28.77	48.03	344.78	0.18	32.34
Elementary school	9.34	15.91	110.82	0.06	10.66
City park	0.42	0.71	5.00	0.00	0.47
Commercial Center 10-30 ac	100.15	174.82	1,226.28	0.61	115.66
Commercial Center <10 ac.	47.56	83.07	582.67	0.29	54.96
Commercial Shops	2.59	4.52	31.69	0.02	2.99
Commercial Office	59.98	104.20	730.89	0.36	68.94
TOTAL EMISSIONS (lbs/day)	330.01	566.89	4,005.67	2.01	377.33

Does not include correction for passby trips.

Includes a double counting reduction for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.90 trips / dwelling units	591.00	5,850.90
Apartments low rise	6.90 trips / dwelling units	455.00	3,139.50
Condo/townhouse general	8.00 trips / dwelling units	398.00	3,184.00
Elementary school	1.45 trips / students	750.00	1,087.50
City park	2.60 trips / acres	20.90	54.34
Commercial Center 10-30 ac	54.06 trips / 1000 sq. ft.	252.00	13,623.12
Commercial Center <10 ac.	85.06 trips / 1000 sq. ft.	76.10	6,473.07
Commercial Shops	37.06 trips / 1000 sq. ft.	9.50	352.07
Commercial Office	11.56 trips / 1000 sq. ft.	702.40	8,119.74

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
City park				5.0	2.5	92.5
Commercial Center 10-30 ac.				2.0	1.0	97.0
Commercial Center <10 ac.				2.0	1.0	97.0
Commercial Shops				2.0	1.0	97.0
Commercial Office				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The area source mitigation measure option switch changed from off to on.
The natural gas residential percentage changed from 60 to 100.
The percentage of wood stoves changed from 35 to 0.
The landscape length of the summer period (in days) changed from 180 to 365.
The landscape year changed from 2004 to 2007.
The consumer product persons per residential unit changed from 2.861 to 3.056.
Mitigation measure Orient Buildings North/South: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Rsdntl Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Rsdntl Lndscp Maint.
has been changed from off to on.
Mitigation measure Central Water Heater: Cmrcl Space Heat.
has been changed from off to on.
Mitigation measure Orient Buildings North/South: Cmrcl Space Heat.
has been changed from off to on.
Mitigation measure Increase Insulation Beyond Title 24: Cmrcl Space Heat.
has been changed from off to on.
Mitigation measure All Electric Landscape Maintenance Equipment: Cmrcl Lndscp Maint.
has been changed from off to on.

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2007.
The double counting internal work trip limit changed from to 791.577.
The double counting shopping trip limit changed from to 395.7885.
The double counting other trip limit changed from to 5234.992.
The travel mode environment settings changed from both to: both
Mitigation measure Mixed Use Project (Residential Oriented):3
has been changed from off to on.
Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1
has been changed from off to on.
Mitigation measure Provide Direct Pedestrian Connections:1
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety:0.5
has been changed from off to on.
Mitigation measure Provide Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Signalization and Signage:0.5
has been changed from off to on.
Mitigation measure Mixed Use Project (Commercial Oriented):1
has been changed from off to on.
Mitigation measure Floor Area Ratio 0.75 or Greater:1
has been changed from off to on.
Mitigation measure Provide Wide Sidewalks and Onsite Pedestrian Facilities:1
has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
has been changed from off to on.
Mitigation measure Project Provides Shade Trees to Shade Sidewalks:0.5
has been changed from off to on.
Mitigation measure Project Provides Street Art and/or Street Furniture:0.5
has been changed from off to on.
Mitigation measure Provide Pedestrian Safety Designs/Infrastructure at Crossings:0.5
has been changed from off to on.
Mitigation measure Articulated Storefront(s) Display Windows with Visual Interest:0.25
has been changed from off to on.
Mitigation measure No Long Uninterrupted Walls Along Pedestrian Walkways:0.25
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Bike Lanes/Paths Connecting to Bikeway System:2
has been changed from off to on.
Mitigation measure Provide Secure Bicycle Parking:1
has been changed from off to on.
Mitigation measure Provide Employee Lockers and Showers:1
has been changed from off to on.
Mitigation measure Shuttle Bus Service to Transit/Multi-Modal Center:2
has been changed from off to on.
Mitigation measure Preferential Carpool/Vanpool Parking:1.5
has been changed from off to on.
Mitigation measure Many Frequently Needed Services Provided:5

age: 6

has been changed from off to on.

litigation measuremitop5: Park and Ride Lots

has been changed from on to off.

SUMMERTIME EMISSIONS REDUCTIONS

ESTIMATE SUMMERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Input Fields		Unmitigated Emissions in Pounds per Day			
LAND USE		CO	VOC	NO _x	PM ₁₀
Single Family Residential Uses	Vehicular Sources	669.49	56.25	66.94	56.43
	Area Sources	9.36	39.23	13.87	9.04
Multi-Family Residential Uses	Vehicular Sources	723.93	64.47	68.67	64.73
	Area Sources	7.36	38.82	9.21	6.03
Commercial/Office/Institutional Uses	Vehicular Sources	2,782.15	221.44	265.41	283.67
	Area Sources	4.80	0.30	9.79	6.93
Wood-Burning Fire Place Emissions	Vehicular Sources	0.93	0.00	0.04	0.03
	Area Sources	0.93	0.00	0.04	0.03
Total Emissions	Vehicular Sources	4,155.39	342.42	391.84	377.33
	Area Sources	21.52	78.84	31.64	0.09
Total Non-Reduced Emissions		4,177.41	421.26	423.48	377.42

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Stationary Sources											
All Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	10.0%	11.0%	9.5%	4.5%	1.74	8.58	2.08	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use built-in energy-efficient appliances	3.0%	2.5%	3.0%	6.5%	0.32	1.95	0.66	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	4.5%	4.5%	4.0%	2.5%	0.78	3.51	0.88	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use fuel cells in residential subdivisions to produce heat and elec.	1.0%	0.0%	1.5%	7.0%	0.17	0.00	0.33	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	13.5%	14.0%	13.0%	10.5%	2.35	10.93	2.85	0.01	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.5%	1.5%	1.5%	1.5%	0.26	1.17	0.33	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	13.0%	14.0%	13.0%	7.5%	2.26	10.93	2.85	0.01	
Multi-Family Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	8.5%	9.0%	8.0%	4.0%	0.00	0.00	0.00	0.00	Central heating systems are not desired by the average multi-family resident.
Commercial, Office, Institutional Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.5%	0.5%	0.5%	1.0%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	1.0%	1.0%	1.0%	1.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	3.0%	3.5%	3.0%	2.5%	0.12	0.03	0.25	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	7.0%	3.0%	8.5%	19.5%	0.29	0.02	0.82	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.0%	1.0%	1.0%	0.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	9.5%	10.0%	9.0%	7.0%	0.39	0.08	0.87	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	12.5%	11.0%	13.5%	17.5%	0.51	0.09	1.39	0.00	
Industrial Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	0.0%	0.0%	0.5%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.5%	0.0%	1.0%	2.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	2.5%	2.0%	3.0%	5.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	0.5%	0.0%	1.0%	3.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Improved storage and handling of source materials	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Materials substitution (e.g., use water-based paints, life cycle analysis)	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Utilize efficient manufacturing processes	1.5%	0.5%	2.0%	6.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Resource recovery systems	3.0%	3.5%	3.0%	1.5%	0.00	0.00	0.00	0.00	

ESTIMATE SUMMERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES	
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀		
Mobile Sources												
Residential Uses												
	X	Allow satellite telecommunications centers in residential subdivisions	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Satellite telecommunications centers are superseded by other technology. Residences are proposed in walking distance to proposed commercial areas.	
	X	Shuttle service from res. subdivisions to commercial core areas	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00		
	X	Construct bus passenger benches and shelters	0.2%	0.2%	0.2%	0.2%	2.79	0.24	0.25	0.25		
	X	Construct pedestrian facility improvements	0.1%	0.1%	0.1%	0.1%	1.39	0.12	0.13	0.12		
	X	Realt services within or adjacent to residential subdivisions	1.3%	1.0%	1.3%	1.3%	18.12	1.21	1.65	1.61		
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	1.39	0.12	0.13	0.12		
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	55.75	4.83	5.07	4.95		
	X	Construct bicycle trails	0.1%	0.1%	0.1%	0.1%	1.39	0.12	0.13	0.12		
Commercial, Office and Institutional Uses												
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25	Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. No commercial retail or office use on site is expected to use fleet vehicles. No commercial retail or office use on site is expected to use fleet vehicles. There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure. Mixed use lots are expected to have food establishments located within walking distance for employees. Such programs are set up by and at the discretion of future occupants of the commercial uses. The requirement to achieve a specific AVR has been ruled unlawful by the federal government. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses.	
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
	X	Provide separate windows for fast-food restaurants	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
	X	Provide video-conference facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00		
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00		
	X	Lunch shuttle service from a worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00		
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses. There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure. Stated use lots are expected to have food establishments located within walking distance for employees. Such programs are set up by and at the discretion of future occupants of the commercial uses. The requirement to achieve a specific AVR has been ruled unlawful by the federal government. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses.	
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00		
	X	Utilize satellite offices rather than regular worksite to reduce VMT	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00		
	X	Establish a home-based telecommuting program	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00		
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25		
	X	Offer travel incentives such as discounts on purchases for transit riders	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	8.29	0.44	0.80	0.76		
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00		
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25		
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00		There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses. Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Residential units within or adjacent to commercial developments	4.0%	3.1%	4.0%	4.0%	110.49	6.87	10.60	10.15		
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25		
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	8.29	0.44	0.80	0.76		
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	5.52	0.44	0.53	0.51		
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25		
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
	X	Charge visitors to park	2.0%	1.5%	2.0%	2.0%	56.24	3.32	5.30	5.07		
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	110.49	8.87	10.60	10.15		
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
	X	Paid parking at walkup kiosks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00		
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.	
	X	Provide commuter information areas	0.1%	0.1%	0.1%	0.1%	2.76	0.22	0.27	0.25		

ESTIMATED SUMMERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Industrial Uses											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement house dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide commuter information areas	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	
	X	Offer loans or other incentives to employees who move locally	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.00	0.00	0.00	0.00	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	0.00	0.00	0.00	0.00	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Lunch shuttle system from worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install aerodynamic add-on devices to heavy-duty trucks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce ship cruising speeds in the inner harbor	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low-emission fuels or electrify airport ground service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Engine tuning for marine vessels	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce number of aircraft engines used during idling	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install monitoring system to control airport shuttles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use centralized ground power systems for airport service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
Reduction in Stationary Sources Emissions (Pounds per day)							-9.56	-37.32	-13.62	-0.04	
Reduction in Mobile Sources Emissions (Pounds per day)							-395.72	-28.36	-37.57	-36.09	
Total Reduction in Emissions Based on Newhall Ranch FEIR Measures (Pounds per day)							-405.28	-65.68	-51.19	-36.13	
Percentage Reduced Based on Newhall Ranch FEIR Measures							-9.70%	-15.59%	-12.09%	-9.57%	
No Wood Burning Fire Places or Stoves in Residential Units							0.00	0.00	0.00	0.00	
Total Percent Reduction Based on Implementation of All Recommended Measures							-9.70%	-15.59%	-12.09%	-9.57%	
Total Reduced Stationary Source Emissions							11.96	41.52	18.02	0.05	
Total Reduced Mobile Source Emissions							3,760.17	314.06	354.27	341.24	
TOTAL REDUCED EMISSIONS							3,772.13	355.58	372.29	341.29	
SCAQMD Thresholds							550.00	55.00	55.00	150.00	
Project Air Quality Impacts Significant?							YES	YES	YES	YES	

WINTERTIME EMISSIONS REDUCTIONS

ESTIMATED WINTERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Input Fields		Unmitigated Emissions in Pounds per Day			
LAND USE		CO	VOC	NO _x	PM ₁₀
Single Family Residential Uses	Vehicular Sources	683.87	52.80	88.27	29.43
	Area Sources	9.86	29.23	13.67	0.06
Multi-Family Residential Uses	Vehicular Sources	864.79	57.17	95.89	64.28
	Area Sources	7.56	34.82	8.27	0.02
Commercial/Office/Institutional Uses	Vehicular Sources	2,657.30	226.04	385.23	253.62
	Area Sources	1.18	0.83	9.70	0.02
Wood-Burning Fire Place Emissions	Vehicular Sources	0.00	0.00	0.00	0.00
	Area Sources	1,764.09	1,617.41	15.56	244.38
Total Emissions	Vehicular Sources	4,005.67	330.01	566.89	377.33
	Area Sources	1,805.61	1,696.25	50.00	244.47
Total Non-Reduced Emissions		5,811.28	2,026.26	616.89	621.80

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No		CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
MEASURES, EFFICIENCIES, AND REDUCTIONS											
Stationary Sources											
All Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	10.0%	11.0%	9.5%	4.5%	1.74	8.58	2.08	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use built-in energy-efficient appliances	3.0%	2.5%	3.0%	6.5%	0.52	1.95	0.66	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	4.5%	4.5%	4.0%	2.5%	0.78	3.51	0.88	0.00	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use fuel cells in residential subdivisions to produce heat and elec.	1.0%	0.0%	1.5%	7.0%	0.17	0.00	0.33	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	13.5%	14.0%	13.0%	10.5%	2.35	10.93	2.85	0.01	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.5%	1.5%	1.5%	1.5%	0.26	1.17	0.33	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	13.0%	14.0%	13.0%	7.5%	2.26	10.93	2.85	0.01	
Multi-Family Residential Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	8.5%	9.0%	8.0%	4.0%	0.00	0.00	0.00	0.00	Central heating systems are not desired by the average multi-family resident.
Commercial, Office, Institutional Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use solar or low emission water heaters	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	Parking structures are not proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use central water heating systems	0.5%	0.5%	0.5%	0.5%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.5%	0.5%	0.5%	1.0%	0.02	0.00	0.05	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	1.0%	1.0%	1.0%	1.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	3.0%	3.5%	3.0%	2.5%	0.12	0.03	0.29	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	7.0%	3.0%	8.5%	19.5%	0.29	0.02	0.82	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	1.0%	1.0%	1.0%	0.5%	0.04	0.01	0.10	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	9.5%	10.0%	9.0%	7.0%	0.39	0.08	0.87	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	12.5%	11.0%	13.5%	17.5%	0.51	0.09	1.31	0.00	
Industrial Uses											
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Provide shade trees to reduce heating/cooling needs	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient and automated controls for air conditioners	0.0%	0.0%	0.0%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use double-glass paned windows	0.0%	0.0%	0.5%	1.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use energy-efficient low-sodium parking lights	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Provide ventilation systems for enclosed parking facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use lighting controls and energy efficient lighting	0.5%	0.0%	1.0%	2.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Use light-colored roof materials to reflect heat	0.0%	0.0%	0.0%	0.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Orient buildings to the north	2.5%	2.0%	3.0%	5.5%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Comply with Title 24	0.5%	0.0%	1.0%	3.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Improved storage and handling of source materials	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Materials substitution (e.g., use water-based paints, life cycle analysis)	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Utilize efficient manufacturing processes	1.5%	0.5%	2.0%	6.0%	0.00	0.00	0.00	0.00	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Resource recovery systems	3.0%	3.5%	3.0%	1.5%	0.00	0.00	0.00	0.00	

ESTIMATED WINTERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Mobile Sources											
Residential Uses											
	X	Allow satellite telecommunications centers in residential subdivisions	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such satellite telecommunications centers are superseded by other technology.
	X	Shuttle service from res. subdivisions to commercial core areas	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Residences are proposed in walking distance to proposed commercial areas.
	X	Construct bus passenger benches and shelters	0.2%	0.2%	0.2%	0.2%	2.64	0.22	0.37	0.25	
	X	Construct pedestrian facility improvements	0.1%	0.1%	0.1%	0.1%	1.32	0.11	0.18	0.12	
	X	Retail services within or adjacent to residential subdivisions	1.3%	1.0%	1.3%	1.3%	17.14	1.30	2.39	1.61	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	1.32	0.11	0.18	0.12	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	52.73	4.40	7.35	4.95	
	X	Construct bicycle trails	0.1%	0.1%	0.1%	0.1%	1.32	0.11	0.18	0.12	
Commercial, Office and Institutional Uses											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide separate windows for fast-food restaurants	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide video-conference facilities	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	No commercial retail or office use on the site is expected to use fleet vehicles.
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	No commercial retail or office use on the site is expected to use fleet vehicles.
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Lunch shuttle service from a worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	Mixed use lots are expected to have food establishments located within walking distance for employees.
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	The requirement to achieve a specific AVR has been ruled unlawful by the federal government.
	X	Utilize satellite offices rather than regular worksite to reduce VMT	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Establish a home-based telecommuting program	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Offer travel incentives such as discounts on purchases for transit riders	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	Such programs are set up by and at the discretion of future occupants of the commercial uses.
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	8.06	0.44	1.15	0.76	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	Residential uses are in close proximity and within walking distance to proposed commercial uses.
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	Residential units within or adjacent to commercial developments	4.0%	3.1%	4.0%	4.0%	107.49	8.82	15.33	10.15	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	8.06	0.44	1.15	0.76	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	5.37	0.44	0.77	0.51	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Charge visitors to park	2.0%	1.5%	2.0%	2.0%	53.75	3.30	7.66	5.07	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	107.49	8.82	15.33	10.15	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Paid parking at walkup kiosks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	There is potential for employees to park in areas designated for retail customers, thereby negating the intent of this measure.
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide commuter information areas	0.1%	0.1%	0.1%	0.1%	2.69	0.22	0.38	0.25	Such programs are set up by and at the discretion of future occupants of the commercial uses.

ESTIMATED WINTERTIME EMISSIONS REDUCTIONS EFFICIENCIES
River Village Emissions With Implementation of Newhall Ranch Specific Plan FEIR Air Quality Mitigation Measures and Without Wood Burning Stoves or Fire Places

Recommended (Measures already incorporated into Project are marked "No.")			Emission Reduction Efficiency				Reduced Emissions in Pounds per Day				REASONS FOR REJECTING MITIGATION MEASURES
Yes	No	MEASURES, EFFICIENCIES, AND REDUCTIONS	CO	VOC	NO _x	PM ₁₀	CO	VOC	NO _x	PM ₁₀	
Industrial Uses:											
	X	Preferential parking spaces for carpools and vanpools	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	No industrial uses are proposed within the project.
	X	Implement on-site circulation plan in parking lots	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Set up resident worker training programs to improve job/housing balance	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement home dispatching system for employees	0.1%	0.0%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Minimize use of fleet vehicles during smog alerts	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low emission fleet vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Provide commuter information areas	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce employee parking spaces for those business not under Rule 2202	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Implement compressed work-week schedules	1.0%	0.8%	1.0%	1.0%	0.00	0.00	0.00	0.00	
	X	Offer loans or other incentives to employees who move locally	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Trip reduction plan to achieve 1.5 AVR for businesses	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide or contribute to child care and after school facilities	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Provide on-site employee services such as cafeteria, banks, etc.	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Shuttle service from residential core area to the worksite	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bus passenger benches and shelters	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Pricing structure for single-occupancy employee parking	2.0%	1.5%	2.0%	2.0%	0.00	0.00	0.00	0.00	
	X	Utilize excess parking as park-n-ride or contribute to park-n-ride	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Construct bicycle facility improvements	0.3%	0.2%	0.3%	0.3%	0.00	0.00	0.00	0.00	
	X	Construct pedestrian facility improvements	0.2%	0.2%	0.2%	0.2%	0.00	0.00	0.00	0.00	
	X	Shuttles to major rail transit centers or multi-modal stations	0.1%	0.1%	0.1%	0.1%	0.00	0.00	0.00	0.00	
	X	Contribute to regional transit systems	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Synchronize traffic lights on streets impacted by development	4.0%	4.0%	4.0%	4.0%	0.00	0.00	0.00	0.00	
	X	Reschedule truck deliveries and pickups for off-peak hours	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Lunch shuttle system from worksite to food establishments	0.5%	0.4%	0.5%	0.5%	0.00	0.00	0.00	0.00	
	X	On-site truck loading zones	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install aerodynamic add-on devices to heavy-duty trucks	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Implement or contribute to public outreach programs	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce ship cruising speeds in the inner harbor	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use low-emission fuels or electrify airport ground service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Engine tuning for marine vessels	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Reduce number of aircraft engines used during idling	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Install monitoring system to control airport shuttles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
	X	Use centralized ground power systems for airport service vehicles	0.0%	0.0%	0.0%	0.0%	0.00	0.00	0.00	0.00	
Reduction in Stationary Sources Emissions (Pounds per day)							-9.56	-37.32	-13.62	-0.04	
Reduction in Mobile Sources Emissions (Pounds per day)							-382.82	-27.61	-64.34	-36.09	
Total Reduction in Emissions Based on Newhall Ranch FEIR Measures (Pounds per day)							-392.38	-64.93	-67.96	-36.13	
Percentage Reduced Based on Newhall Ranch FEIR Measures							-6.75%	-3.20%	-11.02%	-5.81%	
No Wood Burning Fire Places or Stoves in Residential Units							-1,784.09	-1,617.41	-18.35	-244.38	
Total Percent Reduction Based on Implementation of All Recommended Measures							-37.45%	-33.03%	-13.99%	-45.11%	
Total Reduced Stationary Source Emissions							11.96	41.52	18.02	0.05	
Total Reduced Mobile Source Emissions							3,622.85	302.40	512.55	341.24	
TOTAL REDUCED EMISSIONS							3,634.81	343.92	530.57	341.29	
SCAQMD Thresholds							550.00	55.00	55.00	150.00	
Project Air Quality Impacts Significant?							YES	YES	YES	YES	

APPENDIX B

Selected ISCST3 Modeling Output

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S):

AREA1

,

AREA2

,

MMA4

,

FDUST

,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PARMAT10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
347626.66	3811654.75	53.60405	(81112224)	347785.38	3811716.25	58.68578	(81112224)
347875.16	3811740.25	63.51659	(81121824)	347964.91	3811764.00	64.42241	(81121824)
347593.97	3811747.75	52.44645	(81112224)	347442.22	3811665.00	43.32656	(81112224)
347759.63	3811812.75	57.42127	(81121824)	347849.38	3811836.75	60.39397	(81121824)
347939.16	3811860.75	58.42091	(81121824)	347573.13	3811847.00	50.80134	(81112224)
347431.22	3811769.75	45.30037	(81112224)	347289.31	3811692.50	38.43340	(81011824)
347733.88	3811909.50	55.86644	(81121824)	347823.63	3811933.50	56.08175	(81121824)
347913.38	3811957.25	54.49918	(81120624)	347541.47	3811940.25	48.21144	(81112224)
347387.72	3811856.75	44.48390	(81112224)	347234.00	3811773.00	37.65595	(81011824)
347708.09	3812006.00	53.05607	(81121824)	347797.88	3812030.00	51.13541	(81121824)
347887.63	3812054.00	50.85184	(81120624)	347520.13	3812039.25	47.15760	(81121824)
347375.28	3811960.50	44.29606	(81112224)	347230.41	3811881.75	38.36937	(81112224)
347682.34	3812102.75	49.38742	(81121824)	347772.09	3812126.75	48.18049	(81120624)
347861.88	3812150.50	46.84777	(81120624)	347489.19	3812133.25	46.29985	(81121824)
347333.97	3812048.75	42.66306	(81112224)	347178.78	3811964.25	37.72142	(81112224)
347656.56	3812199.25	45.24806	(81121824)	347746.34	3812223.25	45.25813	(81120624)
347836.09	3812247.25	42.66294	(81120624)	347467.44	3812232.00	44.83062	(81121824)
347320.28	3812152.00	40.97287	(81112224)	347173.13	3812071.75	38.47504	(81112224)
347630.81	3812296.00	43.03686	(81120624)	347720.56	3812320.00	41.99494	(81120624)
347810.31	3812343.75	38.49388	(81120624)	347437.09	3812326.00	42.60232	(81121824)
347280.72	3812241.00	39.21150	(81121824)	347124.38	3812156.00	37.33471	(81112224)
347605.03	3812392.50	40.65857	(81120624)	347694.78	3812416.50	38.55555	(81120624)
347784.56	3812440.50	34.73270	(81050924)	347415.00	3812424.75	39.79543	(81121824)
347266.00	3812343.75	39.55707	(81121824)	347117.00	3812262.50	36.74624	(81112224)
347579.25	3812489.25	37.97455	(81120624)	347669.03	3812513.25	35.05600	(81120624)
347758.78	3812537.00	31.99891	(81050924)	347385.09	3812519.00	36.88037	(81121824)
347227.81	3812433.50	38.49865	(81121824)	347070.53	3812348.00	35.31704	(81112024)
346913.25	3812262.25	32.54592	(81112224)	346755.97	3812176.75	28.81101	(81011824)
346627.03	3812059.75	24.52489	(81011824)	347553.50	3812585.75	35.10942	(81120624)
347643.25	3812609.75	31.63450	(81120624)	347733.03	3812633.75	29.29911	(81050924)
347362.72	3812617.50	35.53994	(81120624)	347212.19	3812535.75	37.28145	(81121824)
347061.69	3812453.75	33.91905	(81121824)	346911.19	3812371.75	32.69254	(81112224)
346760.69	3812290.00	29.07115	(81112224)	346562.03	3812137.00	24.56384	(81011824)
346465.75	3811995.25	17.07502	(81011824)	346369.47	3811853.50	17.02971	(81011324)
346273.19	3811711.75	17.69606	(81122624)	347527.72	3812682.50	32.15587	(81120624)
347617.50	3812706.50	29.38421	(81050924)	347707.25	3812730.25	26.69842	(81050924)
348296.06	3810865.75	87.60471	(81011824)	348357.63	3810799.00	93.65473	(81011824)
348419.16	3810732.25	101.03284	(81011824)	348480.72	3810665.75	109.90335	(81011824)
348542.25	3810599.00	125.96651	(81120324)	348603.81	3810532.25	149.75354	(81120324)
348665.38	3810465.50	175.10747	(81120324)	348323.94	3810961.75	102.41319	(81112224)

*** ISCST3 - VERSION 02035 ***

*** LOCALIZED SIGNIFICANCE THRESHOLDS WITH UTILITY CORRIDOR

*** 05/04/06

17:45:19

**MODELOPTs:

PAGE 68

CONC

URBAN FLAT FLGPOL

NOCALM

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): MMAX3 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF CO

IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
347626.66	3811654.75	808.32837	(81121818)	347785.38	3811716.25	581.99390	(81121818)
347875.16	3811740.25	658.35077	(81102818)	347964.91	3811764.00	814.79193	(81102818)
347593.97	3811747.75	752.07849	(81121818)	347442.22	3811665.00	755.02588	(81122518)
347759.63	3811812.75	475.31009	(81102818)	347849.38	3811836.75	675.83588	(81102818)
347939.16	3811860.75	785.15045	(81102818)	347573.13	3811847.00	666.94531	(81121818)
347431.22	3811769.75	703.05566	(81122518)	347289.31	3811692.50	709.24420	(81102318)
347733.88	3811909.50	513.41754	(81102818)	347823.63	3811933.50	680.87543	(81102818)
347913.38	3811957.25	747.35675	(81092918)	347541.47	3811940.25	586.17554	(81121818)
347387.72	3811856.75	668.15302	(81121818)	347234.00	3811773.00	676.29230	(81102318)
347708.09	3812006.00	541.41748	(81102818)	347797.88	3812030.00	674.89441	(81102818)
347887.63	3812054.00	704.84613	(81092918)	347520.13	3812039.25	485.82324	(81121818)
347375.28	3811960.50	654.39392	(81121818)	347230.41	3811881.75	644.32751	(81122518)
347682.34	3812102.75	559.86823	(81102818)	347772.09	3812126.75	659.74762	(81102818)
347861.88	3812150.50	669.73975	(81123017)	347489.19	3812133.25	407.61212	(81121818)
347333.97	3812048.75	618.07056	(81121818)	347178.78	3811964.25	618.39600	(81122518)
347656.56	3812199.25	568.99744	(81102818)	347746.34	3812223.25	637.34680	(81102818)
347836.09	3812247.25	642.29883	(81123017)	347467.44	3812232.00	334.68301	(81091418)
347320.28	3812152.00	553.43719	(81121818)	347173.13	3812071.75	569.31421	(81122518)
347630.81	3812296.00	569.83221	(81102818)	347720.56	3812320.00	609.58148	(81092918)
347810.31	3812343.75	611.62738	(81123017)	347437.09	3812326.00	346.65747	(81102818)
347280.72	3812241.00	504.58502	(81121818)	347124.38	3812156.00	552.42657	(81121818)
347605.03	3812392.50	563.25238	(81102818)	347694.78	3812416.50	578.54663	(81092918)
347784.56	3812440.50	578.78516	(81123017)	347415.00	3812424.75	379.53522	(81102818)
347266.00	3812343.75	422.07892	(81121818)	347117.00	3812262.50	546.87970	(81121818)
347579.25	3812489.25	550.51605	(81102818)	347669.03	3812513.25	553.79919	(81123017)
347758.78	3812537.00	544.82910	(81123017)	347385.09	3812519.00	394.73944	(81102818)
347227.81	3812433.50	373.31073	(81121818)	347070.53	3812348.00	522.40344	(81121818)
346913.25	3812262.25	519.70337	(81122518)	346755.97	3812176.75	505.07880	(81102318)
346627.03	3812059.75	377.25546	(81010918)	347553.50	3812585.75	532.75238	(81102818)
347643.25	3812609.75	535.48071	(81123017)	347733.03	3812633.75	510.37131	(81123017)
347362.72	3812617.50	415.42752	(81102818)	347212.19	3812535.75	296.40744	(81121818)
347061.69	3812453.75	475.16074	(81121818)	346911.19	3812371.75	477.10440	(81121818)
346760.69	3812290.00	488.39807	(81102318)	346562.03	3812137.00	350.13171	(81102318)
346465.75	3811995.25	488.89725	(81010918)	346369.47	3811853.50	433.68945	(81010918)
346273.19	3811711.75	308.62662	(81011318)	347527.72	3812682.50	511.50516	(81092918)
347617.50	3812706.50	514.45856	(81123017)	347707.25	3812730.25	476.25677	(81123017)
348296.06	3810865.75	1774.54285	(81121818)	348357.63	3810799.00	1942.94189	(81121818)
348419.16	3810732.25	2136.71802	(81121818)	348480.72	3810665.75	2362.74341	(81121818)
348542.25	3810599.00	2638.12231	(81121818)	348603.81	3810532.25	2988.43115	(81121818)
348665.38	3810465.50	3469.03589	(81121818)	348323.94	3810961.75	1384.93542	(81121818)

*** ISCST3 - VERSION 02035 ***

*** LOCALIZED SIGNIFICANCE THRESHOLDS WITH UTILITY CORRIDOR

*** 05/04/06

17:45:19

**MODELOPTs:

PAGE 126

CONC

URBAN FLAT FLGPOL

NOCALM

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): MMAX3 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF CO

IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
347626.66	3811654.75	101.04105	(81121824)	347785.38	3811716.25	72.74924	(81121824)
347875.16	3811740.25	94.70206	(81102824)	347964.91	3811764.00	117.05524	(81102824)
347593.97	3811747.75	94.00981	(81121824)	347442.22	3811665.00	94.37823	(81122524)
347759.63	3811812.75	68.79130	(81102824)	347849.38	3811836.75	96.85225	(81102824)
347939.16	3811860.75	112.71533	(81102824)	347573.13	3811847.00	83.36816	(81121824)
347431.22	3811769.75	87.88196	(81122524)	347289.31	3811692.50	88.65553	(81102324)
347733.88	3811909.50	73.82770	(81102824)	347823.63	3811933.50	97.31720	(81102824)
347913.38	3811957.25	107.28569	(81102824)	347541.47	3811940.25	73.27194	(81121824)
347387.72	3811856.75	83.51913	(81121824)	347234.00	3811773.00	84.53654	(81102324)
347708.09	3812006.00	77.47472	(81102824)	347797.88	3812030.00	96.30384	(81102824)
347887.63	3812054.00	101.09027	(81102824)	347520.13	3812039.25	60.72791	(81121824)
347375.28	3811960.50	81.79924	(81121824)	347230.41	3811881.75	80.54094	(81122524)
347682.34	3812102.75	79.82590	(81102824)	347772.09	3812126.75	94.06554	(81102824)
347861.88	3812150.50	94.45025	(81102824)	347489.19	3812133.25	50.95152	(81121824)
347333.97	3812048.75	77.25882	(81121824)	347178.78	3811964.25	77.29950	(81122524)
347656.56	3812199.25	80.91814	(81102824)	347746.34	3812223.25	90.86413	(81102824)
347836.09	3812247.25	87.58324	(81102824)	347467.44	3812232.00	46.73273	(81120316)
347320.28	3812152.00	69.17965	(81121824)	347173.13	3812071.75	71.16428	(81122524)
347630.81	3812296.00	80.89837	(81102824)	347720.56	3812320.00	86.90910	(81102824)
347810.31	3812343.75	80.71815	(81102824)	347437.09	3812326.00	49.73038	(81102824)
347280.72	3812241.00	63.07313	(81121824)	347124.38	3812156.00	69.05332	(81121824)
347605.03	3812392.50	79.89156	(81102824)	347694.78	3812416.50	82.43983	(81102824)
347784.56	3812440.50	75.06859	(81123024)	347415.00	3812424.75	54.11604	(81102824)
347266.00	3812343.75	52.75986	(81121824)	347117.00	3812262.50	68.35996	(81121824)
347579.25	3812489.25	78.06677	(81102824)	347669.03	3812513.25	77.60870	(81102824)
347758.78	3812537.00	71.03560	(81123024)	347385.09	3812519.00	56.07526	(81102824)
347227.81	3812433.50	46.66384	(81121824)	347070.53	3812348.00	65.30043	(81121824)
346913.25	3812262.25	64.96292	(81122524)	346755.97	3812176.75	63.13485	(81102324)
346627.03	3812059.75	64.17401	(81120924)	347553.50	3812585.75	75.57715	(81102824)
347643.25	3812609.75	72.60713	(81102824)	347733.03	3812633.75	66.93452	(81123024)
347362.72	3812617.50	58.80449	(81102824)	347212.19	3812535.75	43.33515	(81120316)
347061.69	3812453.75	59.39509	(81121824)	346911.19	3812371.75	59.63805	(81121824)
346760.69	3812290.00	61.04976	(81102324)	346562.03	3812137.00	58.18017	(81120924)
346465.75	3811995.25	80.14063	(81120924)	346369.47	3811853.50	68.30914	(81120924)
346273.19	3811711.75	38.57833	(81011324)	347527.72	3812682.50	72.56000	(81102824)
347617.50	3812706.50	67.52472	(81102824)	347707.25	3812730.25	62.86865	(81123024)
348296.06	3810865.75	221.81786	(81121824)	348357.63	3810799.00	242.86774	(81121824)
348419.16	3810732.25	267.08975	(81121824)	348480.72	3810665.75	301.87183	(81060216)
348542.25	3810599.00	362.08951	(81060216)	348603.81	3810532.25	449.23532	(81102824)
348665.38	3810465.50	706.92236	(81123024)	348323.94	3810961.75	187.11827	(81102824)

*** ISCST3 - VERSION 02035 ***

*** LOCALIZED SIGNIFICANCE THRESHOLDS WITH UTILITY CORRIDOR

*** 05/04/06

18:02:58

**MODELOPTs:

PAGE 68

CONC

URBAN FLAT FLGPOL

NOCALM

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): MMAX3 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NOX

IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
347626.66	3811654.75	640.82043	(81121818)	347785.38	3811716.25	461.38873	(81121818)
347875.16	3811740.25	521.92236	(81102818)	347964.91	3811764.00	645.94458	(81102818)
347593.97	3811747.75	596.22711	(81121818)	347442.22	3811665.00	598.56372	(81122518)
347759.63	3811812.75	376.81274	(81102818)	347849.38	3811836.75	535.78406	(81102818)
347939.16	3811860.75	622.44568	(81102818)	347573.13	3811847.00	528.73584	(81121818)
347431.22	3811769.75	557.36316	(81122518)	347289.31	3811692.50	562.26923	(81102318)
347733.88	3811909.50	407.02325	(81102818)	347823.63	3811933.50	539.77930	(81102818)
347913.38	3811957.25	592.48383	(81092918)	347541.47	3811940.25	464.70380	(81121818)
347387.72	3811856.75	529.69330	(81121818)	347234.00	3811773.00	536.14594	(81102318)
347708.09	3812006.00	429.22086	(81102818)	347797.88	3812030.00	535.03772	(81102818)
347887.63	3812054.00	558.78259	(81092918)	347520.13	3812039.25	385.14728	(81121818)
347375.28	3811960.50	518.78546	(81121818)	347230.41	3811881.75	510.80511	(81122518)
347682.34	3812102.75	443.84811	(81102818)	347772.09	3812126.75	523.02972	(81102818)
347861.88	3812150.50	530.95117	(81123017)	347489.19	3812133.25	323.14365	(81121818)
347333.97	3812048.75	489.98929	(81121818)	347178.78	3811964.25	490.24728	(81122518)
347656.56	3812199.25	451.08548	(81102818)	347746.34	3812223.25	505.27097	(81102818)
347836.09	3812247.25	509.19681	(81123017)	347467.44	3812232.00	265.32745	(81091418)
347320.28	3812152.00	438.74976	(81121818)	347173.13	3812071.75	451.33664	(81122518)
347630.81	3812296.00	451.74728	(81102818)	347720.56	3812320.00	483.25940	(81092918)
347810.31	3812343.75	484.88135	(81123017)	347437.09	3812326.00	274.82050	(81102818)
347280.72	3812241.00	400.02112	(81121818)	347124.38	3812156.00	437.94858	(81121818)
347605.03	3812392.50	446.53094	(81102818)	347694.78	3812416.50	458.65582	(81092918)
347784.56	3812440.50	458.84491	(81123017)	347415.00	3812424.75	300.88507	(81102818)
347266.00	3812343.75	334.61255	(81121818)	347117.00	3812262.50	433.55115	(81121818)
347579.25	3812489.25	436.43396	(81102818)	347669.03	3812513.25	439.03671	(81123017)
347758.78	3812537.00	431.92548	(81123017)	347385.09	3812519.00	312.93854	(81102818)
347227.81	3812433.50	295.95047	(81121818)	347070.53	3812348.00	414.14706	(81121818)
346913.25	3812262.25	412.00650	(81122518)	346755.97	3812176.75	400.41254	(81102318)
346627.03	3812059.75	299.07773	(81010918)	347553.50	3812585.75	422.35141	(81102818)
347643.25	3812609.75	424.51434	(81123017)	347733.03	3812633.75	404.60831	(81123017)
347362.72	3812617.50	329.33948	(81102818)	347212.19	3812535.75	234.98366	(81121818)
347061.69	3812453.75	376.69434	(81121818)	346911.19	3812371.75	378.23520	(81121818)
346760.69	3812290.00	387.18854	(81102318)	346562.03	3812137.00	277.57477	(81102318)
346465.75	3811995.25	387.58426	(81010918)	346369.47	3811853.50	343.81705	(81010918)
346273.19	3811711.75	244.67067	(81011318)	347527.72	3812682.50	405.50720	(81092918)
347617.50	3812706.50	407.84857	(81123017)	347707.25	3812730.25	377.56326	(81123017)
348296.06	3810865.75	1406.80872	(81121818)	348357.63	3810799.00	1540.31079	(81121818)
348419.16	3810732.25	1693.93127	(81121818)	348480.72	3810665.75	1873.11780	(81121818)
348542.25	3810599.00	2091.43066	(81121818)	348603.81	3810532.25	2369.14600	(81121818)
348665.38	3810465.50	2750.15601	(81121818)	348323.94	3810961.75	1097.93860	(81121818)

*** ISCST3 - VERSION 02035 ***

*** LOCALIZED SIGNIFICANCE THRESHOLDS WITH UTILITY CORRIDOR

*** 05/04/06

18:42:41

**MODELOPTs:

PAGE 76

CONC

URBAN ELEV FLGPOL

NOCALM

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): AREA1 , AREA2 , MMAX4 , FDUST ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PARMAT10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
350105.56	3811049.50	73.19915	(81052024)	350196.59	3811075.25	56.25045	(81052024)
349714.28	3811043.25	82.48074	(81110324)	349805.31	3811068.75	56.14944	(81100824)
349896.38	3811094.50	60.13795	(81052024)	349987.41	3811120.25	69.52186	(81052024)
350078.44	3811145.75	71.28237	(81052024)	350169.50	3811171.50	64.83031	(81052024)
349869.25	3811190.75	47.29948	(81100824)	349960.28	3811216.50	49.48959	(81052024)
350051.34	3811242.00	58.05243	(81052024)	350142.38	3811267.75	60.90403	(81052024)
349842.13	3811287.00	44.88306	(81040124)	349933.16	3811312.75	40.89391	(81100824)
350024.22	3811338.25	41.57552	(81052024)	350115.25	3811364.00	49.12851	(81052024)
349997.09	3811434.50	35.94719	(81100824)	350088.16	3811460.25	36.21637	(81100824)
349780.19	3812204.50	37.26223	(81110324)	349871.25	3812230.25	34.03411	(81110324)
349753.09	3812300.75	35.29784	(81110324)	349844.13	3812326.50	33.38798	(81110324)
349543.88	3812345.75	33.04190	(81110324)	349634.91	3812371.50	33.29230	(81110324)
349725.97	3812397.00	33.07277	(81110324)	349817.00	3812422.75	32.11946	(81110324)
349425.72	3812416.50	29.36454	(81110324)	349516.75	3812442.00	30.47916	(81110324)
349607.81	3812467.75	30.79165	(81110324)	349698.84	3812493.25	30.80611	(81110324)
349789.91	3812519.00	30.45559	(81110324)	349307.56	3812487.00	24.70627	(81110324)
349398.59	3812512.75	27.11057	(81110324)	349489.66	3812538.25	28.25809	(81110324)
349580.69	3812564.00	28.55874	(81110324)	349671.75	3812589.50	28.62547	(81110324)
349762.78	3812615.25	28.60136	(81110324)	350400.69	3810881.75	39.55521	(81121524)
350477.63	3810936.75	35.56195	(81121524)	350554.56	3810992.00	32.19162	(81121524)
350631.50	3811047.25	29.33380	(81121524)	350708.44	3811102.25	26.88220	(81121524)
350785.38	3811157.50	24.75102	(81121524)	350862.31	3811212.50	22.91977	(81022424)
350939.25	3811267.75	21.52954	(81022424)	351016.19	3811322.75	20.29826	(81022424)
351093.13	3811378.00	19.18467	(81022424)	351170.06	3811433.00	18.18595	(81022424)
351247.00	3811488.25	17.28269	(81022424)	351323.94	3811543.50	16.46073	(81022424)
350342.44	3810963.00	37.67170	(81040824)	350419.38	3811018.25	33.57656	(81040824)
350496.31	3811073.25	30.02429	(81040824)	350573.25	3811128.50	26.96075	(81040824)
350650.19	3811183.50	24.29241	(81040824)	350727.13	3811238.75	22.49215	(81121524)
350804.06	3811293.75	21.10041	(81121524)	350881.00	3811349.00	19.83674	(81121524)
350957.94	3811404.00	18.69555	(81121524)	351034.88	3811459.25	17.65428	(81121524)
351111.81	3811514.50	16.70120	(81121524)	351188.75	3811569.50	15.83048	(81121524)
351265.69	3811624.75	15.03088	(81121524)	350361.13	3811099.50	37.92879	(81091124)
350438.06	3811154.50	34.07727	(81091124)	350515.00	3811209.75	30.60025	(81091124)
350591.94	3811264.75	27.48832	(81091124)	350668.88	3811320.00	25.12169	(81040824)
350745.81	3811375.00	23.35481	(81040824)	350822.75	3811430.25	21.71552	(81040824)
350899.69	3811485.50	20.20191	(81040824)	350976.63	3811540.50	18.80738	(81040824)
351053.56	3811595.75	17.52861	(81040824)	351130.50	3811650.75	16.35262	(81040824)
351207.44	3811706.00	15.27787	(81040824)	350302.88	3811180.75	44.21440	(81052024)
350379.81	3811235.75	35.64573	(81052024)	350456.75	3811291.00	30.45369	(81091124)
350533.69	3811346.25	28.56319	(81091124)	350610.63	3811401.25	26.65526	(81091124)

*** ISCST3 - VERSION 02035 ***

*** LOCALIZED SIGNIFICANCE THRESHOLDS WITH UTILITY CORRIDOR

*** 05/04/06

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**MODELOPTs:

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CONC

URBAN FLAT FLGPOL

NOCALM

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): MMAX5 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF CO

IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
350687.56	3811456.50	1367.22534	(81010817)	350764.50	3811511.50	1223.98291	(81110617)
350841.44	3811566.75	1221.18518	(81110617)	350918.38	3811621.75	1173.43823	(81110617)
350995.31	3811677.00	1092.06323	(81110617)	351072.25	3811732.00	1011.66119	(81111217)
351149.19	3811787.25	969.51654	(81111217)	350244.63	3811262.00	1787.23413	(81110418)
350321.56	3811317.25	1473.44080	(81110418)	350398.50	3811372.25	1225.33618	(81012818)
350475.44	3811427.50	1140.93750	(81010817)	350552.38	3811482.50	1278.15039	(81010817)
350629.31	3811537.75	1326.03552	(81010817)	350706.25	3811592.75	1283.90076	(81010817)
350783.19	3811648.00	1168.36182	(81010817)	350860.13	3811703.00	1008.04376	(81010817)
350937.06	3811758.25	964.06335	(81110617)	351014.00	3811813.50	967.21027	(81110617)
351090.94	3811868.50	940.93762	(81110617)	350263.31	3811398.50	1570.14453	(81110418)
350340.25	3811453.50	1335.80859	(81110418)	350417.19	3811508.75	1073.09863	(81010117)
350494.13	3811563.75	1014.68610	(81012818)	350571.06	3811619.00	930.33380	(81010817)
350648.00	3811674.00	1046.62744	(81010817)	350724.94	3811729.25	1097.80090	(81010817)
350801.88	3811784.50	1082.31091	(81010817)	350878.81	3811839.50	1011.10028	(81010817)
350955.75	3811894.75	901.01947	(81010817)	351032.69	3811949.75	771.10065	(81010817)
350205.06	3811479.75	1393.22119	(81110418)	350282.00	3811534.75	1394.91003	(81110418)
350358.91	3811590.00	1222.03870	(81110418)	350435.88	3811645.00	934.14532	(81010117)
350512.81	3811700.25	901.52496	(81012818)	350589.75	3811755.50	844.75116	(81012818)
350666.69	3811810.50	777.77820	(81010817)	350743.63	3811865.75	875.82159	(81010817)
350820.56	3811920.75	926.59192	(81010817)	350897.50	3811976.00	927.27893	(81010817)
350974.44	3812031.00	884.30731	(81010817)	350146.81	3811561.00	1342.13550	(81010109)
350223.72	3811616.00	1221.21008	(81110418)	350300.66	3811671.25	1247.92896	(81110418)
350377.63	3811726.50	1123.79114	(81110418)	350454.56	3811781.50	884.05243	(81110418)
350531.50	3811836.75	814.29761	(81010117)	350608.44	3811891.75	777.38092	(81012818)
350685.38	3811947.00	709.33527	(81012818)	350762.31	3812002.00	663.15424	(81010817)
350839.25	3812057.25	746.44739	(81010817)	350916.19	3812112.25	794.72375	(81010817)
350319.38	3811807.75	1122.09973	(81110418)	350396.31	3811862.75	1036.90247	(81110418)
350473.25	3811918.00	848.13971	(81110418)	350550.16	3811973.00	724.62286	(81010117)
350627.13	3812028.25	704.53070	(81010117)	350704.06	3812083.25	671.98431	(81012818)
350781.00	3812138.50	601.87750	(81012818)	350857.94	3812193.75	573.77454	(81010817)
350338.03	3811944.00	1013.17438	(81110418)	350414.97	3811999.25	958.56580	(81110418)
350491.91	3812054.25	810.86859	(81110418)	350568.88	3812109.50	636.31366	(81010117)
350645.81	3812164.75	646.41766	(81010117)	350722.75	3812219.75	620.07166	(81012818)
350799.69	3812275.00	583.78870	(81012818)	350279.78	3812025.50	871.63977	(81010109)
350356.72	3812080.50	918.08612	(81110418)	350433.66	3812135.75	887.49609	(81110418)
350510.63	3812190.75	773.26172	(81110418)	350587.56	3812246.00	609.65509	(81110418)
350664.50	3812301.00	584.34564	(81010117)	350741.41	3812356.25	572.76257	(81010117)
350221.53	3812106.75	909.80627	(81010109)	350298.47	3812161.75	797.10107	(81010109)
350375.41	3812217.00	834.58722	(81110418)	350452.38	3812272.00	822.73932	(81110418)
350529.28	3812327.25	735.63708	(81110418)	350606.22	3812382.25	599.58759	(81110418)

*** ISCST3 - VERSION 02035 ***

*** LOCALIZED SIGNIFICANCE THRESHOLDS WITH UTILITY CORRIDOR

*** 05/04/06

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**MODELOPTs:

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CONC

URBAN FLAT FLGPOL

NOCALM

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): MMAX5 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF CO

IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
350687.56	3811456.50	170.90317	(81010824)	350764.50	3811511.50	152.99786	(81110624)
350841.44	3811566.75	152.64815	(81110624)	350918.38	3811621.75	146.67978	(81110624)
350995.31	3811677.00	136.50790	(81110624)	351072.25	3811732.00	126.90885	(81111224)
351149.19	3811787.25	121.76389	(81111224)	350244.63	3811262.00	243.49524	(81010116)
350321.56	3811317.25	185.08791	(81040116)	350398.50	3811372.25	182.03152	(81040116)
350475.44	3811427.50	168.59827	(81040116)	350552.38	3811482.50	159.76880	(81010824)
350629.31	3811537.75	165.75444	(81010824)	350706.25	3811592.75	160.48759	(81010824)
350783.19	3811648.00	146.04523	(81010824)	350860.13	3811703.00	126.00547	(81010824)
350937.06	3811758.25	120.50792	(81110624)	351014.00	3811813.50	120.90128	(81110624)
351090.94	3811868.50	117.61720	(81110624)	350263.31	3811398.50	205.92622	(81010116)
350340.25	3811453.50	166.97607	(81110424)	350417.19	3811508.75	142.98212	(81040116)
350494.13	3811563.75	137.74451	(81040116)	350571.06	3811619.00	127.30431	(81040116)
350648.00	3811674.00	130.82843	(81010824)	350724.94	3811729.25	137.22511	(81010824)
350801.88	3811784.50	135.28886	(81010824)	350878.81	3811839.50	126.38754	(81010824)
350955.75	3811894.75	112.62743	(81010824)	351032.69	3811949.75	96.38758	(81010824)
350205.06	3811479.75	232.80600	(81010116)	350282.00	3811534.75	178.61185	(81010116)
350358.91	3811590.00	152.75484	(81110424)	350435.88	3811645.00	116.76817	(81010124)
350512.81	3811700.25	112.95525	(81040116)	350589.75	3811755.50	107.74803	(81040116)
350666.69	3811810.50	99.83820	(81040116)	350743.63	3811865.75	109.47770	(81010824)
350820.56	3811920.75	115.82399	(81010824)	350897.50	3811976.00	115.90987	(81010824)
350974.44	3812031.00	110.53841	(81010824)	350146.81	3811561.00	225.99571	(81010116)
350223.72	3811616.00	203.88036	(81010116)	350300.66	3811671.25	158.02663	(81010116)
350377.63	3811726.50	140.47389	(81110424)	350454.56	3811781.50	110.50655	(81110424)
350531.50	3811836.75	101.78720	(81010124)	350608.44	3811891.75	97.18406	(81012824)
350685.38	3811947.00	88.68815	(81012824)	350762.31	3812002.00	82.89428	(81010824)
350839.25	3812057.25	93.30592	(81010824)	350916.19	3812112.25	99.34047	(81010824)
350319.38	3811807.75	142.03850	(81010116)	350396.31	3811862.75	129.61281	(81110424)
350473.25	3811918.00	106.01746	(81110424)	350550.16	3811973.00	90.57786	(81010124)
350627.13	3812028.25	88.06634	(81010124)	350704.06	3812083.25	84.00467	(81012824)
350781.00	3812138.50	75.24727	(81012824)	350857.94	3812193.75	71.72182	(81010824)
350338.03	3811944.00	129.38583	(81010116)	350414.97	3811999.25	119.82072	(81110424)
350491.91	3812054.25	101.35857	(81110424)	350568.88	3812109.50	79.53921	(81010124)
350645.81	3812164.75	80.80221	(81010124)	350722.75	3812219.75	77.51096	(81012824)
350799.69	3812275.00	72.97752	(81012824)	350279.78	3812025.50	148.19556	(81010116)
350356.72	3812080.50	119.10957	(81010116)	350433.66	3812135.75	110.93701	(81110424)
350510.63	3812190.75	96.65771	(81110424)	350587.56	3812246.00	76.20689	(81110424)
350664.50	3812301.00	73.04321	(81010124)	350741.41	3812356.25	71.59532	(81010124)
350221.53	3812106.75	150.49057	(81010116)	350298.47	3812161.75	136.00629	(81010116)
350375.41	3812217.00	110.59169	(81010116)	350452.38	3812272.00	102.84241	(81110424)
350529.28	3812327.25	91.95464	(81110424)	350606.22	3812382.25	74.94845	(81110424)

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S): MMAX5 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NOX				IN MICROGRAMS/M**3				**			
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)

- -											
- -											
350687.56	3811456.50	1084.20471	(81010817)	350764.50	3811511.50	970.61389	(81110617)				
350841.44	3811566.75	968.39539	(81110617)	350918.38	3811621.75	930.53217	(81110617)				
350995.31	3811677.00	866.00214	(81110617)	351072.25	3811732.00	802.24359	(81111217)				
351149.19	3811787.25	768.82306	(81111217)	350244.63	3811262.00	1417.27014	(81110418)				
350321.56	3811317.25	1168.43311	(81110418)	350398.50	3811372.25	971.68707	(81012818)				
350475.44	3811427.50	904.75922	(81010817)	350552.38	3811482.50	1013.56860	(81010817)				
350629.31	3811537.75	1051.54138	(81010817)	350706.25	3811592.75	1018.12854	(81010817)				
350783.19	3811648.00	926.50665	(81010817)	350860.13	3811703.00	799.37500	(81010817)				
350937.06	3811758.25	764.49866	(81110617)	351014.00	3811813.50	766.99414	(81110617)				
351090.94	3811868.50	746.16010	(81110617)	350263.31	3811398.50	1245.11877	(81110418)				
350340.25	3811453.50	1059.29126	(81110418)	350417.19	3811508.75	850.96326	(81010117)				
350494.13	3811563.75	804.64233	(81012818)	350571.06	3811619.00	737.75128	(81010817)				
350648.00	3811674.00	829.97168	(81010817)	350724.94	3811729.25	870.55212	(81010817)				
350801.88	3811784.50	858.26855	(81010817)	350878.81	3811839.50	801.79877	(81010817)				
350955.75	3811894.75	714.50513	(81010817)	351032.69	3811949.75	611.47998	(81010817)				
350205.06	3811479.75	1104.81934	(81110418)	350282.00	3811534.75	1106.15857	(81110418)				
350358.91	3811590.00	969.07227	(81110418)	350435.88	3811645.00	740.77380	(81010117)				
350512.81	3811700.25	714.90594	(81012818)	350589.75	3811755.50	669.88458	(81012818)				
350666.69	3811810.50	616.77527	(81010817)	350743.63	3811865.75	694.52332	(81010817)				
350820.56	3811920.75	734.78400	(81010817)	350897.50	3811976.00	735.32880	(81010817)				
350974.44	3812031.00	701.25244	(81010817)	350146.81	3811561.00	1064.30859	(81010109)				
350223.72	3811616.00	968.41510	(81110418)	350300.66	3811671.25	989.60309	(81110418)				
350377.63	3811726.50	891.16223	(81110418)	350454.56	3811781.50	701.05029	(81110418)				
350531.50	3811836.75	645.73499	(81010117)	350608.44	3811891.75	616.46021	(81012818)				
350685.38	3811947.00	562.50031	(81012818)	350762.31	3812002.00	525.87891	(81010817)				
350839.25	3812057.25	591.93005	(81010817)	350916.19	3812112.25	630.21301	(81010817)				
350319.38	3811807.75	889.82098	(81110418)	350396.31	3811862.75	822.25989	(81110418)				
350473.25	3811918.00	672.57166	(81110418)	350550.16	3811973.00	574.62323	(81010117)				
350627.13	3812028.25	558.69025	(81010117)	350704.06	3812083.25	532.88110	(81012818)				
350781.00	3812138.50	477.28665	(81012818)	350857.94	3812193.75	455.00110	(81010817)				
350338.03	3811944.00	803.44354	(81110418)	350414.97	3811999.25	760.13916	(81110418)				
350491.91	3812054.25	643.01581	(81110418)	350568.88	3812109.50	504.59442	(81010117)				
350645.81	3812164.75	512.60681	(81010117)	350722.75	3812219.75	491.71451	(81012818)				
350799.69	3812275.00	462.94229	(81012818)	350279.78	3812025.50	691.20715	(81010109)				
350356.72	3812080.50	728.03888	(81110418)	350433.66	3812135.75	703.78113	(81110418)				
350510.63	3812190.75	613.19373	(81110418)	350587.56	3812246.00	483.45425	(81110418)				
350664.50	3812301.00	463.38394	(81010117)	350741.41	3812356.25	454.19861	(81010117)				
350221.53	3812106.75	721.47302	(81010109)	350298.47	3812161.75	632.09821	(81010109)				
350375.41	3812217.00	661.82458	(81110418)	350452.38	3812272.00	652.42926	(81110418)				
350529.28	3812327.25	583.35748	(81110418)	350606.22	3812382.25	475.47076	(81110418)				

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S):

AREA1

,

AREA2

,

MMA4

,

FDUST

,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PARMAT10 IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
351137.25	3812921.25	16.14313	(81052024)	351221.50	3812967.00	16.34660	(81052024)
351305.72	3813012.50	16.35024	(81052024)	351389.97	3813058.00	16.16867	(81052024)
351474.19	3813103.75	15.81066	(81052024)	351558.44	3813149.25	15.29916	(81052024)
351642.69	3813194.75	14.64612	(81052024)	351726.91	3813240.25	13.88247	(81052024)
351811.16	3813286.00	13.02132	(81052024)	350588.44	3812731.50	13.67566	(81100824)
350668.47	3812781.50	13.54616	(81100824)	350752.72	3812827.00	13.10821	(81100824)
350836.94	3812872.50	12.41710	(81100824)	350921.19	3812918.25	12.30259	(81052024)
351005.44	3812963.75	13.22211	(81052024)	351089.66	3813009.25	13.95037	(81052024)
351173.91	3813054.75	14.47810	(81052024)	351258.13	3813100.50	14.82160	(81052024)
351342.38	3813146.00	14.99209	(81052024)	351426.63	3813191.50	15.00355	(81052024)
351510.88	3813237.25	14.86106	(81052024)	351595.09	3813282.75	14.57701	(81052024)
351679.34	3813328.25	14.16154	(81052024)	351763.56	3813373.75	13.62739	(81052024)
350563.97	3812833.75	12.24389	(81100824)	350705.13	3812915.00	12.59879	(81100824)
350789.38	3812960.50	12.32517	(81100824)	350873.63	3813006.00	11.78564	(81100824)
350957.84	3813051.75	11.08601	(81100824)	351042.09	3813097.25	11.61481	(81052024)
351126.31	3813142.75	12.36989	(81052024)	351210.56	3813188.50	12.95627	(81052024)
351294.81	3813234.00	13.38850	(81052024)	351379.03	3813279.50	13.67218	(81052024)
351463.28	3813325.00	13.81575	(81052024)	351547.50	3813370.75	13.83074	(81052024)
351631.75	3813416.25	13.72072	(81052024)	351716.00	3813461.75	13.49699	(81052024)
350512.84	3812919.50	11.41281	(81091924)	350657.56	3813003.00	11.50303	(81100824)
350741.78	3813048.50	11.71999	(81100824)	350826.03	3813094.00	11.58576	(81100824)
350910.25	3813139.75	11.18084	(81100824)	350994.50	3813185.25	10.60059	(81100824)
351078.75	3813230.75	10.21298	(81052024)	351162.97	3813276.25	10.96671	(81052024)
351247.22	3813322.00	11.58457	(81052024)	351331.47	3813367.50	12.06911	(81052024)
351415.69	3813413.00	12.42342	(81052024)	351499.94	3813458.75	12.65887	(81052024)
351584.16	3813504.25	12.78368	(81052024)	351668.41	3813549.75	12.80352	(81052024)
350461.69	3813005.25	11.78056	(81012824)	350609.97	3813090.75	10.78012	(81091924)
350694.19	3813136.50	10.68447	(81091924)	350778.44	3813182.00	10.90687	(81100824)
350862.69	3813227.50	10.89114	(81100824)	350946.91	3813273.25	10.60623	(81100824)
351031.16	3813318.75	10.13522	(81100824)	351115.41	3813364.25	9.55598	(81100824)
351199.63	3813409.75	9.73474	(81052024)	351283.88	3813455.50	10.35720	(81052024)
351368.13	3813501.00	10.87235	(81052024)	351452.34	3813546.50	11.27095	(81052024)
351536.59	3813592.25	11.56583	(81052024)	351620.84	3813637.75	11.76579	(81052024)
350410.56	3813091.00	11.96780	(81102424)	350562.38	3813178.75	10.56862	(81012824)
350646.63	3813224.50	10.08630	(81091924)	350730.88	3813270.00	10.13109	(81091924)
350815.09	3813315.50	10.15265	(81100824)	350899.34	3813361.00	10.23567	(81100824)
350983.59	3813406.75	10.05719	(81100824)	351067.81	3813452.25	9.68692	(81100824)
351152.06	3813497.75	9.19163	(81100824)	351236.28	3813543.50	8.64065	(81052024)
351320.53	3813589.00	9.26912	(81052024)	351404.78	3813634.50	9.79267	(81052024)
351489.00	3813680.00	10.21904	(81052024)	351573.25	3813725.75	10.55204	(81052024)

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL

INCLUDING SOURCE(S): MMAX4 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF CO				IN MICROGRAMS/M**3				**			
X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
351137.25	3812921.25	423.62610	(81010817)	351221.50	3812967.00	373.24118	(81010817)				
351305.72	3813012.50	342.15247	(81110617)	351389.97	3813058.00	367.84460	(81110617)				
351474.19	3813103.75	384.63330	(81110617)	351558.44	3813149.25	392.42184	(81110617)				
351642.69	3813194.75	391.28409	(81110617)	351726.91	3813240.25	381.95496	(81110617)				
351811.16	3813286.00	365.64822	(81110617)	350588.44	3812731.50	347.02457	(81012818)				
350668.47	3812781.50	341.88116	(81010817)	350752.72	3812827.00	397.03619	(81010817)				
350836.94	3812872.50	438.14774	(81010817)	350921.19	3812918.25	461.65338	(81010817)				
351005.44	3812963.75	466.31885	(81010817)	351089.66	3813009.25	453.05017	(81010817)				
351173.91	3813054.75	424.64697	(81010817)	351258.13	3813100.50	385.15796	(81010817)				
351342.38	3813146.00	338.87552	(81010817)	351426.63	3813191.50	315.96207	(81110617)				
351510.88	3813237.25	339.52402	(81110617)	351595.09	3813282.75	355.82449	(81110617)				
351679.34	3813328.25	364.29514	(81110617)	351763.56	3813373.75	364.96829	(81110617)				
350563.97	3812833.75	373.37595	(81012818)	350705.13	3812915.00	291.54099	(81012818)				
350789.38	3812960.50	343.49207	(81010817)	350873.63	3813006.00	388.37595	(81010817)				
350957.84	3813051.75	419.64648	(81010817)	351042.09	3813097.25	434.91269	(81010817)				
351126.31	3813142.75	433.75156	(81010817)	351210.56	3813188.50	417.53217	(81010817)				
351294.81	3813234.00	388.95920	(81010817)	351379.03	3813279.50	351.58255	(81010817)				
351463.28	3813325.00	309.02472	(81010817)	351547.50	3813370.75	292.92621	(81110617)				
351631.75	3813416.25	314.86697	(81110617)	351716.00	3813461.75	330.52850	(81110617)				
350512.84	3812919.50	380.39960	(81012818)	350657.56	3813003.00	336.30090	(81012818)				
350741.78	3813048.50	290.92624	(81012818)	350826.03	3813094.00	295.19458	(81010817)				
350910.25	3813139.75	341.16617	(81010817)	350994.50	3813185.25	377.34412	(81010817)				
351078.75	3813230.75	400.51984	(81010817)	351162.97	3813276.25	409.29248	(81010817)				
351247.22	3813322.00	403.82745	(81010817)	351331.47	3813367.50	385.78046	(81010817)				
351415.69	3813413.00	357.52222	(81010817)	351499.94	3813458.75	322.30270	(81010817)				
351584.16	3813504.25	283.12585	(81010817)	351668.41	3813549.75	272.76169	(81110617)				
350461.69	3813005.25	370.49197	(81010117)	350609.97	3813090.75	352.05743	(81012818)				
350694.19	3813136.50	327.22067	(81012818)	350778.44	3813182.00	288.67938	(81012818)				
350862.69	3813227.50	252.34503	(81010817)	350946.91	3813273.25	297.64441	(81010817)				
351031.16	3813318.75	336.25220	(81010817)	351115.41	3813364.25	364.87125	(81010817)				
351199.63	3813409.75	381.35046	(81010817)	351283.88	3813455.50	384.98792	(81010817)				
351368.13	3813501.00	376.41788	(81010817)	351452.34	3813546.50	357.16141	(81010817)				
351536.59	3813592.25	329.66708	(81010817)	351620.84	3813637.75	296.51086	(81010817)				
350410.56	3813091.00	343.21326	(81010117)	350562.38	3813178.75	342.06357	(81010117)				
350646.63	3813224.50	335.93979	(81012818)	350730.88	3813270.00	317.30060	(81012818)				
350815.09	3813315.50	285.03610	(81012818)	350899.34	3813361.00	244.31369	(81012818)				
350983.59	3813406.75	258.16174	(81010817)	351067.81	3813452.25	297.40900	(81010817)				
351152.06	3813497.75	329.31052	(81010817)	351236.28	3813543.50	351.38632	(81010817)				
351320.53	3813589.00	362.47391	(81010817)	351404.78	3813634.50	362.21384	(81010817)				
351489.00	3813680.00	351.34836	(81010817)	351573.25	3813725.75	331.52121	(81010817)				

*** ISCST3 - VERSION 02035 ***

*** LOCALIZED SIGNIFICANCE THRESHOLDS WITH UTILITY CORRIDOR

*** 05/04/06

17:55:03

**MODELOPTs:

PAGE 136

CONC

URBAN FLAT FLGPOL

NOCALM

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): MMAX4 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF CO

IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
351137.25	3812921.25	52.95326	(81010824)	351221.50	3812967.00	46.65515	(81010824)
351305.72	3813012.50	42.76906	(81110624)	351389.97	3813058.00	45.98058	(81110624)
351474.19	3813103.75	48.07916	(81110624)	351558.44	3813149.25	49.05273	(81110624)
351642.69	3813194.75	48.91051	(81110624)	351726.91	3813240.25	47.74437	(81110624)
351811.16	3813286.00	45.70603	(81110624)	350588.44	3812731.50	43.37958	(81012824)
350668.47	3812781.50	42.73515	(81010824)	350752.72	3812827.00	49.62952	(81010824)
350836.94	3812872.50	54.76847	(81010824)	350921.19	3812918.25	57.70667	(81010824)
351005.44	3812963.75	58.28986	(81010824)	351089.66	3813009.25	56.63127	(81010824)
351173.91	3813054.75	53.08087	(81010824)	351258.13	3813100.50	48.14474	(81010824)
351342.38	3813146.00	42.35944	(81010824)	351426.63	3813191.50	39.49526	(81110624)
351510.88	3813237.25	42.44050	(81110624)	351595.09	3813282.75	44.47806	(81110624)
351679.34	3813328.25	45.53689	(81110624)	351763.56	3813373.75	45.62104	(81110624)
350563.97	3812833.75	46.67206	(81012824)	350705.13	3812915.00	36.44388	(81012824)
350789.38	3812960.50	42.93651	(81010824)	350873.63	3813006.00	48.54699	(81010824)
350957.84	3813051.75	52.45581	(81010824)	351042.09	3813097.25	54.36409	(81010824)
351126.31	3813142.75	54.21894	(81010824)	351210.56	3813188.50	52.19152	(81010824)
351294.81	3813234.00	48.61990	(81010824)	351379.03	3813279.50	43.94782	(81010824)
351463.28	3813325.00	38.62809	(81010824)	351547.50	3813370.75	36.61578	(81110624)
351631.75	3813416.25	39.35837	(81110624)	351716.00	3813461.75	41.31606	(81110624)
350512.84	3812919.50	47.54995	(81012824)	350657.56	3813003.00	42.03761	(81012824)
350741.78	3813048.50	36.36619	(81012824)	350826.03	3813094.00	36.89932	(81010824)
350910.25	3813139.75	42.64577	(81010824)	350994.50	3813185.25	47.16801	(81010824)
351078.75	3813230.75	50.06498	(81010824)	351162.97	3813276.25	51.16156	(81010824)
351247.22	3813322.00	50.47843	(81010824)	351331.47	3813367.50	48.22256	(81010824)
351415.69	3813413.00	44.69028	(81010824)	351499.94	3813458.75	40.28784	(81010824)
351584.16	3813504.25	35.39073	(81010824)	351668.41	3813549.75	34.09521	(81110624)
350461.69	3813005.25	46.31150	(81010124)	350609.97	3813090.75	44.00718	(81012824)
350694.19	3813136.50	40.90258	(81012824)	350778.44	3813182.00	36.08492	(81012824)
350862.69	3813227.50	31.54313	(81010824)	350946.91	3813273.25	37.20555	(81010824)
351031.16	3813318.75	42.03152	(81010824)	351115.41	3813364.25	45.60891	(81010824)
351199.63	3813409.75	47.66881	(81010824)	351283.88	3813455.50	48.12349	(81010824)
351368.13	3813501.00	47.05223	(81010824)	351452.34	3813546.50	44.64518	(81010824)
351536.59	3813592.25	41.20839	(81010824)	351620.84	3813637.75	37.06386	(81010824)
350410.56	3813091.00	42.90166	(81010124)	350562.38	3813178.75	42.75795	(81010124)
350646.63	3813224.50	41.99247	(81012824)	350730.88	3813270.00	39.66257	(81012824)
350815.09	3813315.50	35.62951	(81012824)	350899.34	3813361.00	30.53921	(81012824)
350983.59	3813406.75	32.27022	(81010824)	351067.81	3813452.25	37.17612	(81010824)
351152.06	3813497.75	41.16381	(81010824)	351236.28	3813543.50	43.92329	(81010824)
351320.53	3813589.00	45.30924	(81010824)	351404.78	3813634.50	45.27673	(81010824)
351489.00	3813680.00	43.91854	(81010824)	351573.25	3813725.75	41.44015	(81010824)

*** ISCST3 - VERSION 02035 ***

*** LOCALIZED SIGNIFICANCE THRESHOLDS WITH UTILITY CORRIDOR

*** 05/04/06

18:05:24

**MODELOPTs:

PAGE 78

CONC

URBAN FLAT FLGPOL

NOCALM

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): MMAX4 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NOX

IN MICROGRAMS/M**3

**

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
351137.25	3812921.25	335.88861	(81010817)	351221.50	3812967.00	295.93896	(81010817)
351305.72	3813012.50	271.28906	(81110617)	351389.97	3813058.00	291.66010	(81110617)
351474.19	3813103.75	304.97165	(81110617)	351558.44	3813149.25	311.14709	(81110617)
351642.69	3813194.75	310.24503	(81110617)	351726.91	3813240.25	302.84802	(81110617)
351811.16	3813286.00	289.91861	(81110617)	350588.44	3812731.50	275.15210	(81012818)
350668.47	3812781.50	271.07394	(81010817)	350752.72	3812827.00	314.80579	(81010817)
350836.94	3812872.50	347.40268	(81010817)	350921.19	3812918.25	366.04007	(81010817)
351005.44	3812963.75	369.73926	(81010817)	351089.66	3813009.25	359.21869	(81010817)
351173.91	3813054.75	336.69806	(81010817)	351258.13	3813100.50	305.38766	(81010817)
351342.38	3813146.00	268.69080	(81010817)	351426.63	3813191.50	250.52296	(81110617)
351510.88	3813237.25	269.20499	(81110617)	351595.09	3813282.75	282.12946	(81110617)
351679.34	3813328.25	288.84573	(81110617)	351763.56	3813373.75	289.37949	(81110617)
350563.97	3812833.75	296.04584	(81012818)	350705.13	3812915.00	231.15974	(81012818)
350789.38	3812960.50	272.35123	(81010817)	350873.63	3813006.00	307.93915	(81010817)
350957.84	3813051.75	332.73325	(81010817)	351042.09	3813097.25	344.83768	(81010817)
351126.31	3813142.75	343.91702	(81010817)	351210.56	3813188.50	331.05682	(81010817)
351294.81	3813234.00	308.40164	(81010817)	351379.03	3813279.50	278.76608	(81010817)
351463.28	3813325.00	245.02242	(81010817)	351547.50	3813370.75	232.25809	(81110617)
351631.75	3813416.25	249.65468	(81110617)	351716.00	3813461.75	262.07254	(81110617)
350512.84	3812919.50	301.61481	(81012818)	350657.56	3813003.00	266.64941	(81012818)
350741.78	3813048.50	230.67233	(81012818)	350826.03	3813094.00	234.05666	(81010817)
350910.25	3813139.75	270.50702	(81010817)	350994.50	3813185.25	299.19214	(81010817)
351078.75	3813230.75	317.56793	(81010817)	351162.97	3813276.25	324.52365	(81010817)
351247.22	3813322.00	320.19052	(81010817)	351331.47	3813367.50	305.88123	(81010817)
351415.69	3813413.00	283.47556	(81010817)	351499.94	3813458.75	255.55038	(81010817)
351584.16	3813504.25	224.48749	(81010817)	351668.41	3813549.75	216.26985	(81110617)
350461.69	3813005.25	293.75916	(81010117)	350609.97	3813090.75	279.14261	(81012818)
350694.19	3813136.50	259.44980	(81012818)	350778.44	3813182.00	228.89082	(81012818)
350862.69	3813227.50	200.08170	(81010817)	350946.91	3813273.25	235.99908	(81010817)
351031.16	3813318.75	266.61081	(81010817)	351115.41	3813364.25	289.30255	(81010817)
351199.63	3813409.75	302.36874	(81010817)	351283.88	3813455.50	305.25284	(81010817)
351368.13	3813501.00	298.45773	(81010817)	351452.34	3813546.50	283.18951	(81010817)
351536.59	3813592.25	261.38953	(81010817)	351620.84	3813637.75	235.10031	(81010817)
350410.56	3813091.00	272.13016	(81010117)	350562.38	3813178.75	271.21857	(81010117)
350646.63	3813224.50	266.36310	(81012818)	350730.88	3813270.00	251.58429	(81012818)
350815.09	3813315.50	226.00211	(81012818)	350899.34	3813361.00	193.71373	(81012818)
350983.59	3813406.75	204.69371	(81010817)	351067.81	3813452.25	235.81244	(81010817)
351152.06	3813497.75	261.10681	(81010817)	351236.28	3813543.50	278.61047	(81010817)
351320.53	3813589.00	287.40170	(81010817)	351404.78	3813634.50	287.19550	(81010817)
351489.00	3813680.00	278.58038	(81010817)	351573.25	3813725.75	262.85965	(81010817)

Final Report

**Assessment of the Contributions of Local Emissions Versus
Transport to Ozone and Particulate Matter (PM)
Air Quality in the Santa Clarita Valley Area**

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July 19, 2004

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EXECUTIVE SUMMARY

ENVIRON International Corporation has evaluated whether significant amounts of ozone and particulate matter (PM) in the Santa Clarita Valley area (SC Valley) result from local emissions. For that evaluation, ENVIRON compared the ozone and PM pollution levels in the SC Valley with and without local SC Valley development, traffic or industrial emissions. ENVIRON's study shows that the great majority of ozone and PM pollution results from emissions from outside the SC Valley.

SCAQMD Santa Clarita Transport Study

The South Coast Air Quality Management District (SCAQMD) is also performing a study on the role of "transport" on air quality in the Valley ("SCAQMD Study"). Transport refers to pollution in the SC Valley that comes from outside SC Valley (e.g., the greater Los Angeles area). Preliminary results were presented in late June by SCAQMD staff.

The SCAQMD Study addresses the contributions of local emissions in the Valley on 1-hour ozone and PM₁₀ concentrations. To assess the contributions of local emissions, the SCAQMD ran air quality models for ozone and PM with and without local man-made emissions. Preliminary results from the SCAQMD Study, presented in late June 2004, found that pollution from the San Fernando Valley and Los Angeles dominates local air quality in SC Valley and that local emissions contribute only about 2% to the local ozone levels. It also found that, even assuming full development in the Valley, the estimated maximum increase in annual PM₁₀ concentrations would be 5 ug/m³, or about 10% of the annual state limit for PM₁₀. PM₁₀ consists of PM with a geometric mean diameter of 10 microns or less as compared to fine particulate, or PM_{2.5}, that includes PM with a mean diameter of 2.5 microns or less.

ENVIRON Santa Clarita Valley Study

ENVIRON conducted two analyses: one similar to the SCAQMD Study where emissions from the center of the SC Valley (where most emissions are located) were evaluated, and one where emissions from a larger area that incorporated the entire SC Valley were considered. The areas that comprise the smaller and larger definitions of the SC Valley are shown in Figures ES-1 and ES-2.

The SCAQMD and ENVIRON Santa Clarita Valley Studies both used similar air quality planning models to estimate the contribution of local emissions to local air quality in the SC Valley. The report contains a full explanation of the model used by ENVIRON.

Ozone Modeling Analysis

Ozone is formed in the atmosphere through a set of complex chemical reactions involving oxides of nitrogen (NO_x) and Volatile Organic Compounds (VOC) in the presence of sunlight. Sources of NO_x and VOC include mobile sources, other combustion sources, consumer products, solvents, and biogenics.

Looking at the smaller area approximating the center of the SC Valley, local emissions contribute from 1-3% of the estimated peak 1-hour ozone for the current year. For the future year case, local emissions contribute between 0.4% and 5% to the peak 1-hour ozone concentrations in the SC Valley. Looking at the larger SC Valley area, local pollution contributed 0.6% to 9% of the total ozone. These percentages are slightly higher than for the SC Valley center area because the emissions have a longer range to travel (and transform into ozone) in the larger SC Valley area than in the center or smaller SC Valley area.

Looking at the smaller center SC Valley area, local SC Valley emissions are estimated to range from having nearly no effect to contributing up to 2% of the peak 8-hour ozone levels in the Valley. Looking at future emissions in the center SC Valley area, local emissions contribute from between 0.1% and 1.7% of the total 8-hour ozone levels. When the larger definition of the SC Valley is used, local emissions are estimated to contribute between 0.7% and 6.1% using current emissions and 0.6% to 7.7% using future emissions.

In conclusion, a vast majority (> 90%) of the peak 1-hour and 8-hour ozone concentrations in the SC Valley are due to emissions from outside of the SC Valley. These results are consistent with the SCAQMD Santa Clarita Transport Study that has reported, "Santa Clarita emissions contribute about 2% to the local ozone impact" (Cassmassi, 2004).

PM Modeling Analysis

PM consists of primary emitted PM from sources such as road dust, agricultural dust, mining, combustion and other sources and secondary PM that is formed in the atmosphere from SO₂, NO_x and VOC emissions.

To assess the contributions of local SC Valley emissions to PM₁₀ and PM_{2.5} air quality in the SC Valley, ENVIRON used models and data that are similar to those used by the SCAQMD for air quality planning purposes.

Looking at the area approximating the center of the SC Valley, local emissions contribute approximately 15% and 16% to the maximum annual average PM₁₀ and PM_{2.5} concentrations in the SC Valley, respectively. Looking at the larger SC Valley area, the contribution of local emissions to the annual average PM₁₀ and PM_{2.5} concentrations in the SC Valley are approximately 16% and 19%, respectively.

The contributions of local emissions to the four highest 24-hour PM₁₀ concentrations in the smaller central SC Valley area range from 5% to 14%. Local SC Valley emissions have a lower contribution to the four highest 24-hour PM_{2.5} concentrations in this smaller SC Valley area, with local contributions ranging from 2% to 7%. Local emissions have a lower relative contribution to local PM_{2.5} levels than to local PM₁₀ concentrations because PM₁₀ deposits out faster than PM_{2.5}. When the larger SC Valley area is studied, the contribution of local sources is even lower than for the smaller, central SC Valley area.

Summary

In summary, the ENVIRON study demonstrates that the impact of SC Valley emissions sources on SC Valley ozone and PM air quality is small. The great majority of ozone and PM pollution in the SC Valley is created by sources of emissions outside the SC Valley.

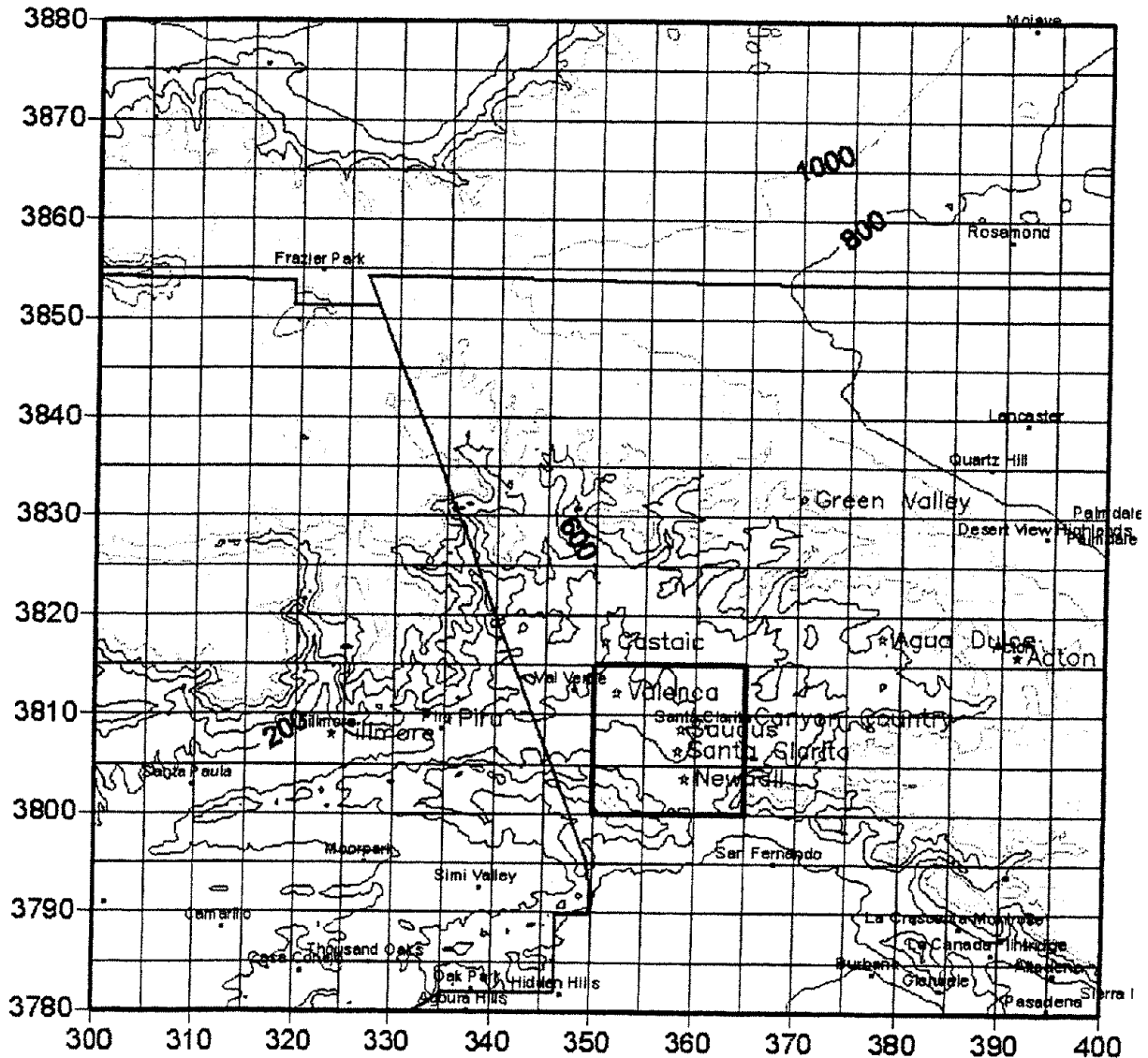


Figure ES-1. Cities, terrain heights and 5-km grid cell boundaries and the smaller (nine 5-km grid cells-red box) definition of the Santa Clarita Valley.

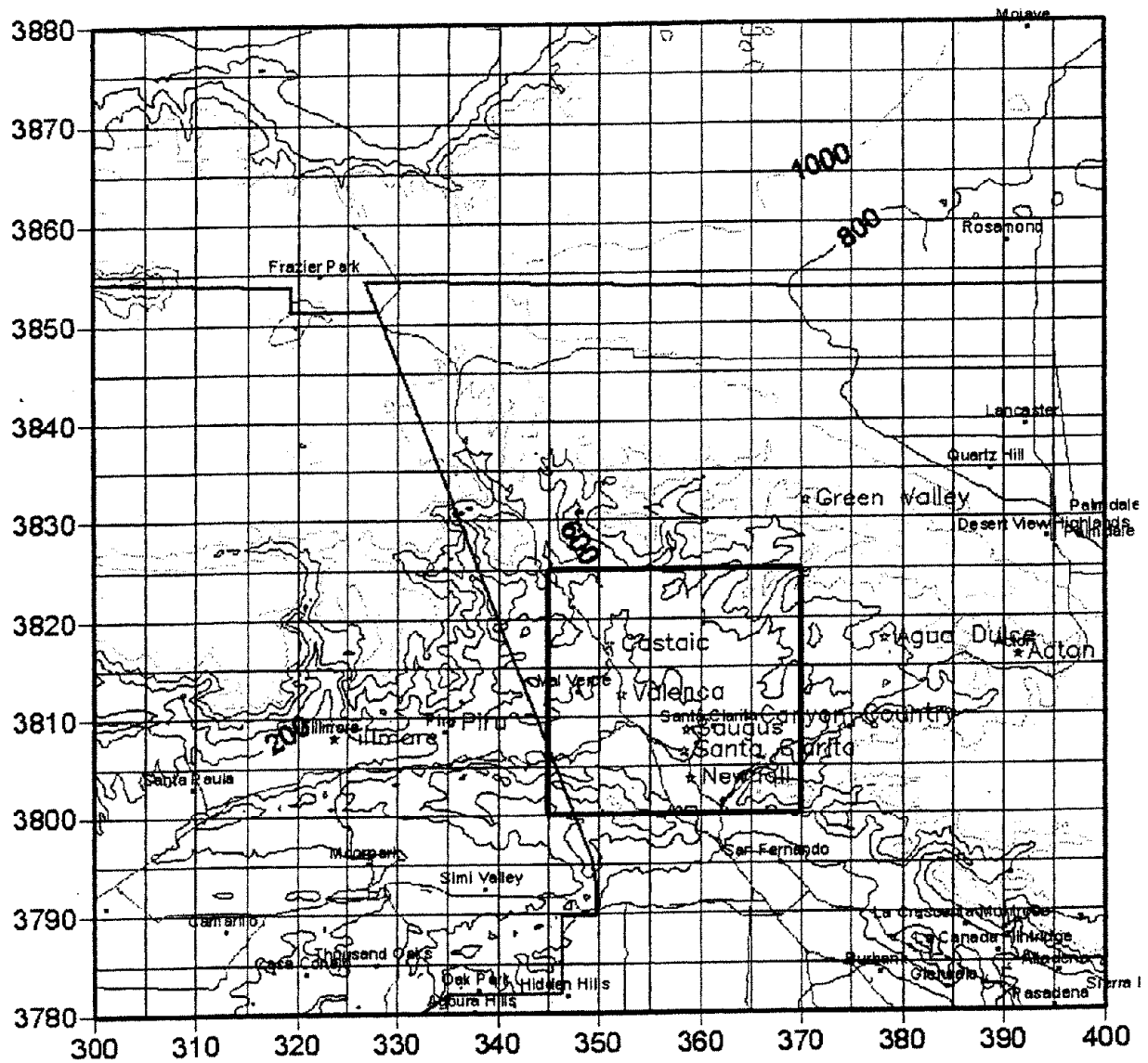


Figure ES-2. Cities, terrain heights and 5-km grid cell boundaries and the larger (25 - 5-km grid cells-red box) definition of the Santa Clarita Valley.

1.0 INTRODUCTION

ENVIRON International Corporation has been retained to evaluate whether significant amounts of ozone and particulate matter (PM) in the Santa Clarita Valley area are due to local emissions. In particular, ENVIRON has been asked to compare the ozone and PM pollution levels in the Santa Clarita Valley area with and without anthropogenic emissions in the Santa Clarita Valley area. The analysis needs to address the contribution of local emissions in the Santa Clarita Valley on both 1-hour and 8-hour ozone concentrations as well as on both 24-hour and annual PM_{2.5} and PM₁₀ concentrations. PM₁₀ consists of PM with a geometric mean diameter of 10 microns or less as compared to fine particulate or PM_{2.5} that includes PM with a mean diameter of 2.5 microns or less.

SCAQMD Santa Clarita Transport Study

ENVIRON has discussed this issue with the South Coast Air Quality Management District (SCAQMD) staff members, who have informed us that the SCAQMD is just completing a study on the role of "transport" on air quality in the Santa Clarita area (SCAQMD Santa Clarita Transport Study) (J. Cassmassi, 2004, personal communication). Transport is defined as the level of air pollutants in Santa Clarita due to sources from outside of Santa Clarita. A summary of the results of the SCAQMD Transport Study was presented to the SCAQMD Mobile Source Committee public meeting on June 25, 2004 (Cassmassi, 2004). The SCAQMD Santa Clarita Transport Study report is expected to be completed by the end of summer (Cassmassi, 2004). The SCAQMD Santa Clarita Transport Study performed ozone, PM and diesel air toxics risk modeling to assess the contributions of local emissions from the City of Santa Clarita versus transported emissions from outside of Santa Clarita on ozone and PM concentrations and risk due to diesel particles in the Santa Clarita area.

According to the June 25, 2004 presentation to the Mobile Source Committee, the SCAQMD Santa Clarita Transport Study had the following objectives (Cassmassi, 2004):

- Characterize and evaluate observed ozone and particulate air quality: (1) trends; (2) impact of local emissions; and (3) weekend effects.
- Evaluate the impact of potential growth on air quality through simulation of doubled mobile source emissions and simulating a 25-year valley build-out.
- Evaluate the impact of CEMEX mining operations.
- Provide potential mitigation measures.

To achieve these objectives the SCAQMD performed the following model sensitivity analysis to address ozone, PM₁₀ and diesel risk:

- Ozone
 - Modeling and trend analysis
 - Zero and doubled emissions in Santa Clarita
 - Zero emissions in Santa Barbara and Ventura
 - Weekend emissions
- PM₁₀
 - Zero emissions in Santa Clarita

- 25-year construction build-out
- CEMEX mine operations
- Additional Risk From Diesel Particulates
 - Baseline MATES-II average risk
 - CEMEX mine operations
 - Heavy duty diesel truck gravel hauling

Based on the presentation to the SCAQMD Mobile Source Committee, the following were some of the key findings from the SCAQMD Santa Clarita Transport Study (Cassmassi, 2004):

Ozone

- Transport from San Fernando Valley and L.A. dominates local air quality in Santa Clarita
- Santa Clarita emissions contribute about 2% to local ozone impact
- Weekend ozone concentrations under average transport are ~23% higher than on weekdays

PM₁₀

- Santa Clarita meets federal standard but exceeds the more restrictive California standard
- Assumed simultaneous 25-year build-out in city and county portions of valley
- Annual impact up to 5 ug/m³ due to build-out
- Maximum impact near Newhall Ranch due to build-out.

Diesel Particulate Risk

- Santa Clarita background average risk of 500 in one million (MATES II study)
- Average Basin risk 1400 in one million

The SCAQMD used ozone and PM models for both a Base Case (i.e., all emissions in the South Coast Air Basin) and for a "Santa Clarita Zero-Out Case" (i.e., the elimination of all anthropogenic emissions in the City of Santa Clarita). The difference in the Base Case and Santa Clarita Zero-Out Case provides an estimate of the contributions of local emissions to air quality, with the remainder contribution due to transport. The SCAQMD Santa Clarita Transport Study also enhanced emissions in the Santa Clarita area (i.e., doubled mobile source emissions for ozone and 25-year maximum build-out for PM₁₀) to examine the effects that increases in these emissions in Santa Clarita would have on air quality in Santa Clarita.

The SCAQMD "Santa Clarita Zero-Out Case" eliminated all anthropogenic emissions in the City of Santa Clarita. For this purpose, the SCAQMD reportedly defined the City of Santa Clarita area as an area comprised of 9 5-km grid cells that cover the City of Santa Clarita and geographically adjacent area (J. Cassmassi, 2004, personal communication).

ENVIRON Santa Clarita Valley Transport Study

ENVIRON has undertaken a Santa Clarita Valley Transport Study to assess the contributions of local emissions versus transport to ozone and PM concentrations in the Santa Clarita Valley area. In addition to trying to analyze the effects of local emissions on local air quality in Santa Clarita, as was done in the SCAQMD Santa Clarita Transport Study, the ENVIRON Santa Clarita Valley

Transport Study has expanded the study concept to a larger area that encompasses more of the geographical Santa Clarita Valley area and addresses both 1-hour and 8-hour ozone as well as both coarse (PM₁₀) and fine (PM_{2.5}) particulates. Thus, ENVIRON identified two geographical areas in the Santa Clarita Valley area where anthropogenic emissions were eliminated to examine the contributions from local emissions versus transport to air quality in the Santa Clarita Valley area: (1) a 9-grid cell area at 5-km resolution (i.e., 225 km² or 87 mi²) encompassing the City of Santa Clarita and geographical nearby areas that is ENVIRON's best estimate of the 9-grid cell area reportedly used by the SCAQMD in the SCAQMD Santa Clarita Transport Study (J. Cassmassi, 2004, personal communication); and (2) an expanded area that encompasses a 25-grid cell area at 5-km resolution (i.e., 625 km² or 241 mi²) that includes Cities of Santa Clarita, Newhall, Saugus, Valencia, Castaic, Val Verde and adjacent areas.

Definition of the Modeling Analysis

ENVIRON has performed ozone and PM modeling for a Base Case and Santa Clarita Valley Area Zero-Out Case to estimate the contributions of local emissions to 1-hour and 8-hour ozone and 24-hour and annual PM₁₀ and PM_{2.5} air quality in the Santa Clarita Valley area.

Ozone Modeling

For the ozone modeling, ENVIRON used the 2003 Air Quality Management Plan (AQMP) August 3-7, 1997 Southern California Ozone Study (SCOS) ozone modeling database (SCAQMD, 2003). This database is for the Urban Airshed Model (UAM) (Morris and Meyers, 1990) and covers southwestern California from San Diego in the south to San Luis Obispo in the north and the Pacific Ocean in the west to approximately the California/Arizona border in the east using a 110 by 74 5-km grid cell resolution (see "SCOS" domain in Figure 1-1). The effects of Santa Clarita Valley area emissions versus pollutant transport from upwind areas on local air quality was assessed for the current episode year (1997) and a future year (2007). The Santa Clarita Valley area violated the Federal 1-hour and 8-hour ozone standards in 1997. In 2007, the Santa Clarita Valley area is projected to attain the 1-hour ozone standard, but violate the 8-hour ozone standard. By examining both the 1997 episode year and 2007 1-hour attainment year we will be able to bound the contributions of local emissions versus transport on ozone air quality in the Santa Clarita Valley area for the years in between (1997-2007).

PM Modeling

To assess the contributions of local emissions to PM air quality in the Santa Clarita Valley area ENVIRON used an annual PM modeling database for a 1997/1998 annual period (April 1998-March 1998). This modeling period was used in the SCAQMD's Multiple Air Toxics Exposure Study and (MATES-II) (SCAQMD, 2000) and the Department of Energy (DOE) National Renewable Energy Laboratory (NREL) Biodiesel assessment study (Morris and Jia, 2002) to simulate air toxics and PM, respectively. The PM modeling was performed on a 65 by 40 5-km grid (see "AQMP" domain in Figure 1-1). Emissions in this PM modeling database are available for just the for the 1997/1998 year so the PM modeling analysis was performed for the episode (1997/1998) year.

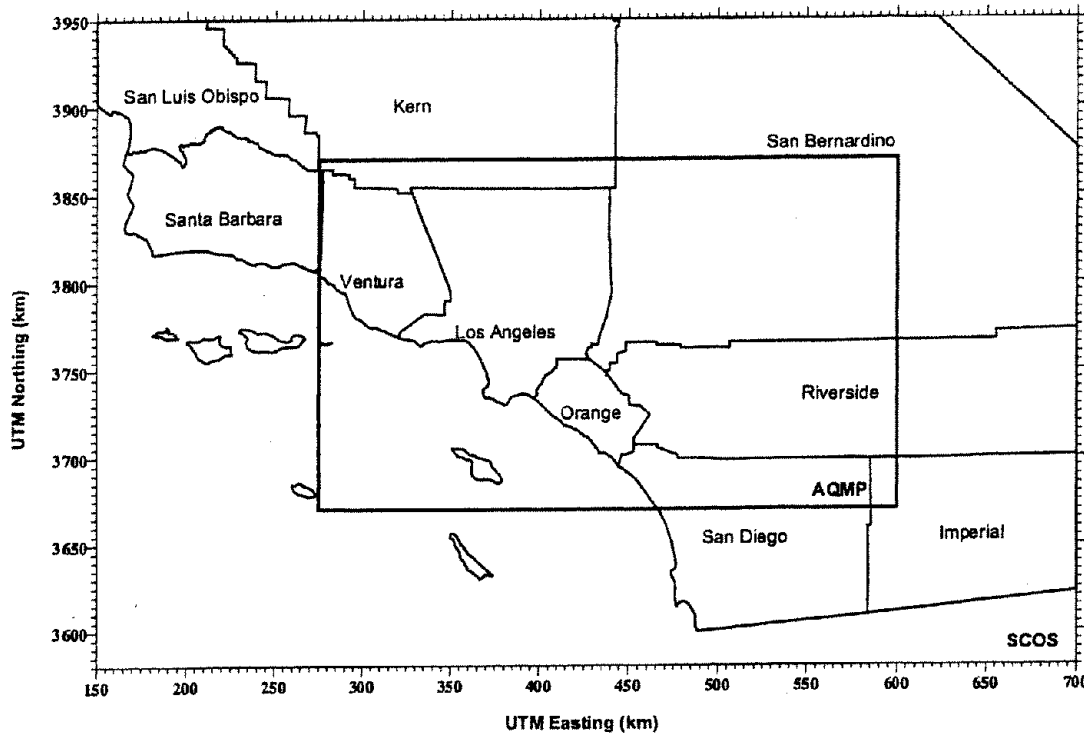


Figure 1-1. Definition of the 110 x 74 5-km SCOS and 65 x 40 5-km AQMP domains used in the ozone and PM modeling, respectively.

Definition of Santa Clarita Valley Area

For the Santa Clarita Valley Zero-Out Cases, the definition of the Santa Clarita Valley area where anthropogenic emissions will be eliminated must be defined. Two definitions were used in this modeling.

As discussed above, in the SCAQMD transport study the SCAAQMD reportedly used nine (3 x 3) 5-km grid cells (225 km² or 87 mi²) to represent the Santa Clarita Valley area (J. Cassmassi, 2004, personal communication), thus ENVIRON has also used nine 5-km grid cells for its study to attempt to replicate the assumptions used in the SCAQMD Santa Clarita Transport Study as closely as possible. This area captures the majority of the ozone and PM precursor emissions in the Santa Clarita Valley area. Figure 1-2 displays a portion of the ozone/PM modeling domain that includes northern Los Angeles County focusing on the Santa Clarita Valley area. The 9 5-km grid cell area is centered on the City of Santa Clarita and is represented by the red box in Figure 1-2. This nine cell definition of the Santa Clarita Valley area for the zero-out run includes communities within and directly outside of the city of Santa Clarita, Newhall, Saugus, Valencia and Canyon County -- but not the communities of Castaic and Val Verde or Piru and Fillmore to the west in Ventura County, Agua Dulce and Acton to the east, Lebec and Gorman to the north, or Sylmar/San Fernando to the south that are further away from the City of Santa Clarita.

Figures 1-3 and 1-4 display the daily average VOC and NO_x emissions for the same subdomain as depicted in Figure 1-2, with the nine grid cells that are used to represent the Santa Clarita Valley area indicated by the red box. Although there are areas with higher emissions to the south

in the San Fernando Valley that are outside the Santa Clarita Valley, these nine grid cells appear to encompass the highest emitting grid cells within the Santa Clarita Valley area.

For the 25 (5 x 5) grid cell definition of the Santa Clarita Valley area, the 9 grid cell area was expanded to the west, north and east by two 5-km grid cells as shown in Figure 1-5; the area was not expanded to the south into the San Fernando Valley. The 25 grid cell definition of the Santa Clarita Valley area includes the 9 grid cell area discussed previously, as well as the cities of Castaic and Val Verde and unincorporated areas.

Note that after the ENVIRON ozone and PM modeling was completed, the SCAQMD released a presentation on their Santa Clarita Transport Study that indicated their Santa Clarita Zero-Out runs eliminated anthropogenic emissions in 10 5-km grid cells (Cassmassi, 2004), not 9-grid cells as originally reported (J. Cassmassi, 2004, personal communication). The SCAQMD's 10-grid cells were completely contained with the ENVIRON study enhanced 25-grid cell definition of the Santa Clarita Valley area.

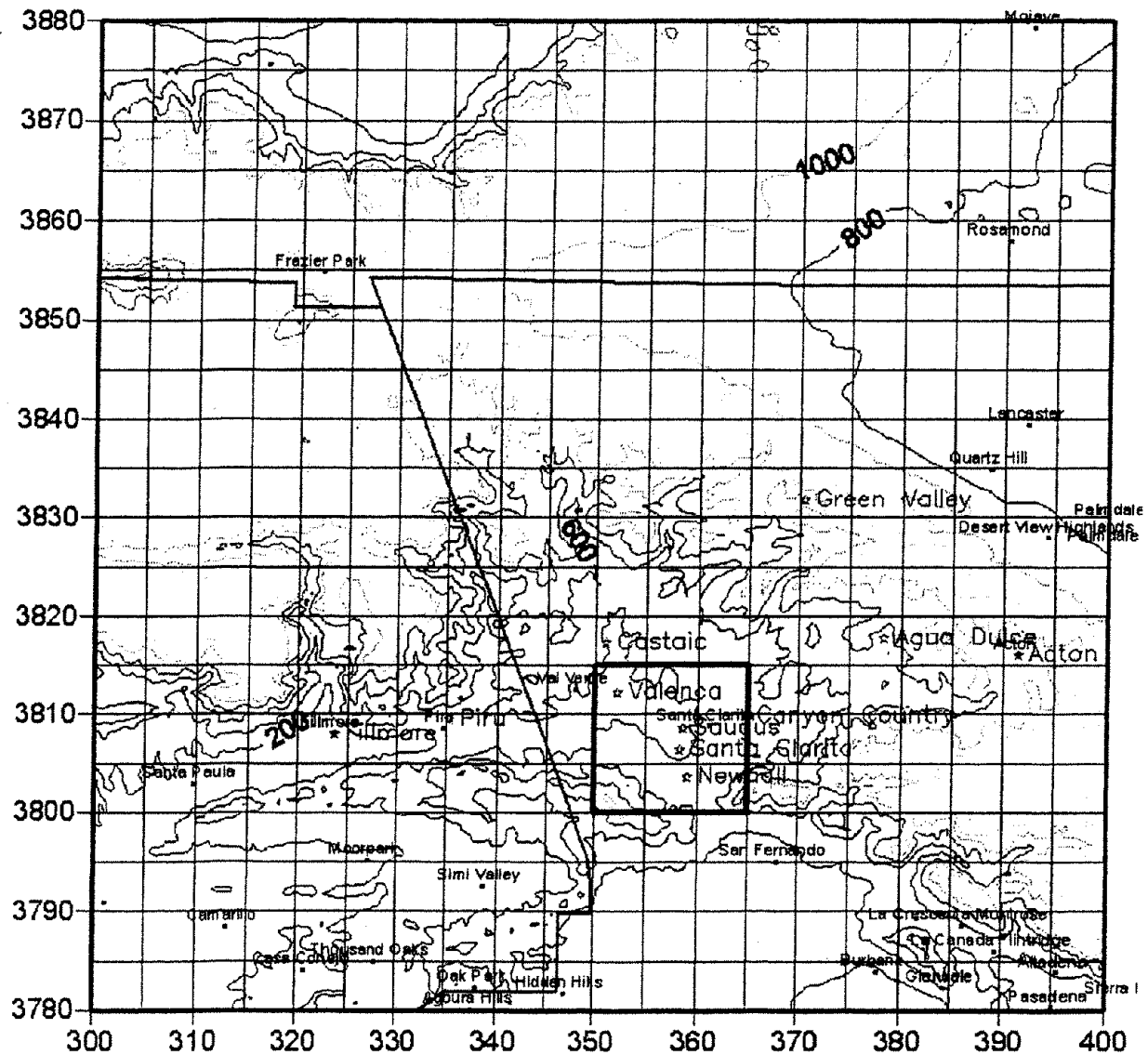


Figure 1-2. Cities, terrain heights and 5-km grid cell definitions in the subregion of the ozone/PM modeling domains that includes Santa Clarita and definition of the 9 5-km grid cells (red box) proposed to be used to represent the Santa Clarita Valley area.

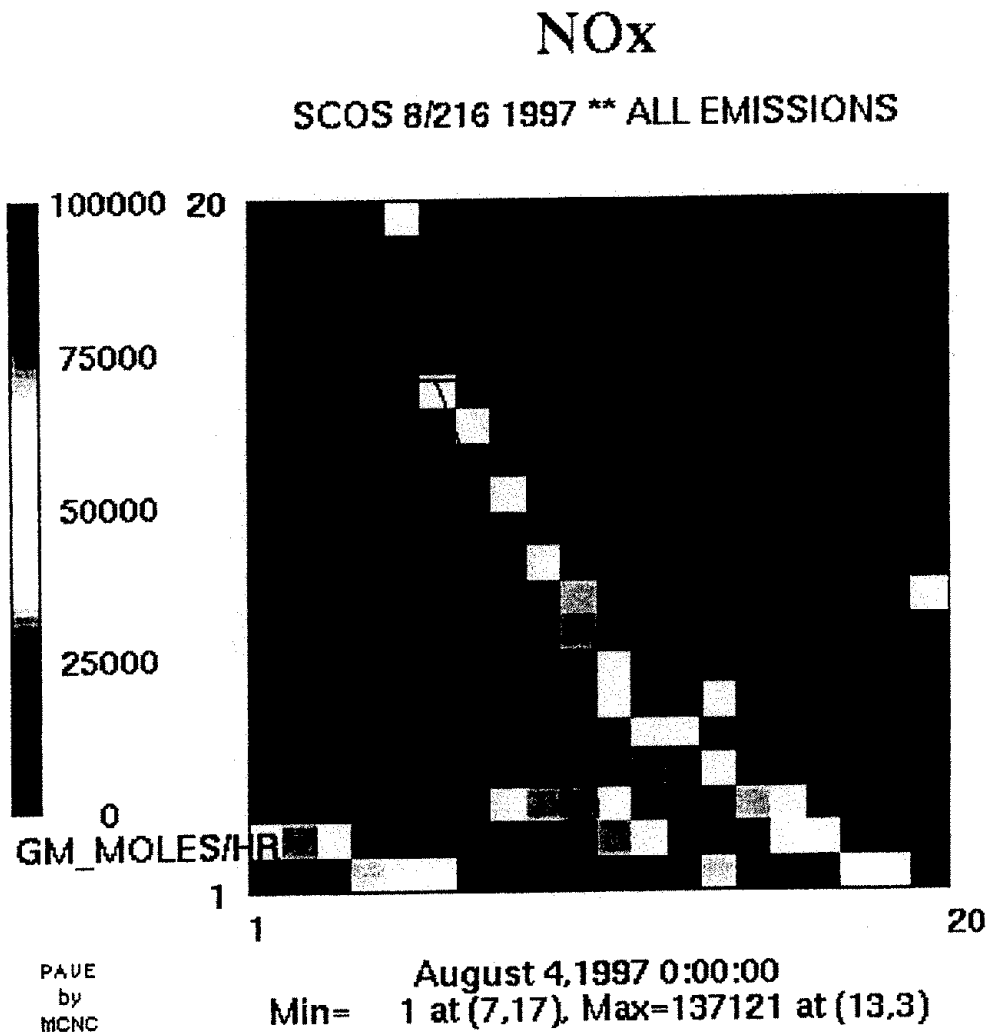


Figure 1-3. Spatial distribution of NO_x emissions in the Santa Clarita Valley area and definition of the 9 5-km grid cells used to represent the Santa Clarita Valley area.

VOC

SCOS 8/216 1997 ** ALL EMISSIONS

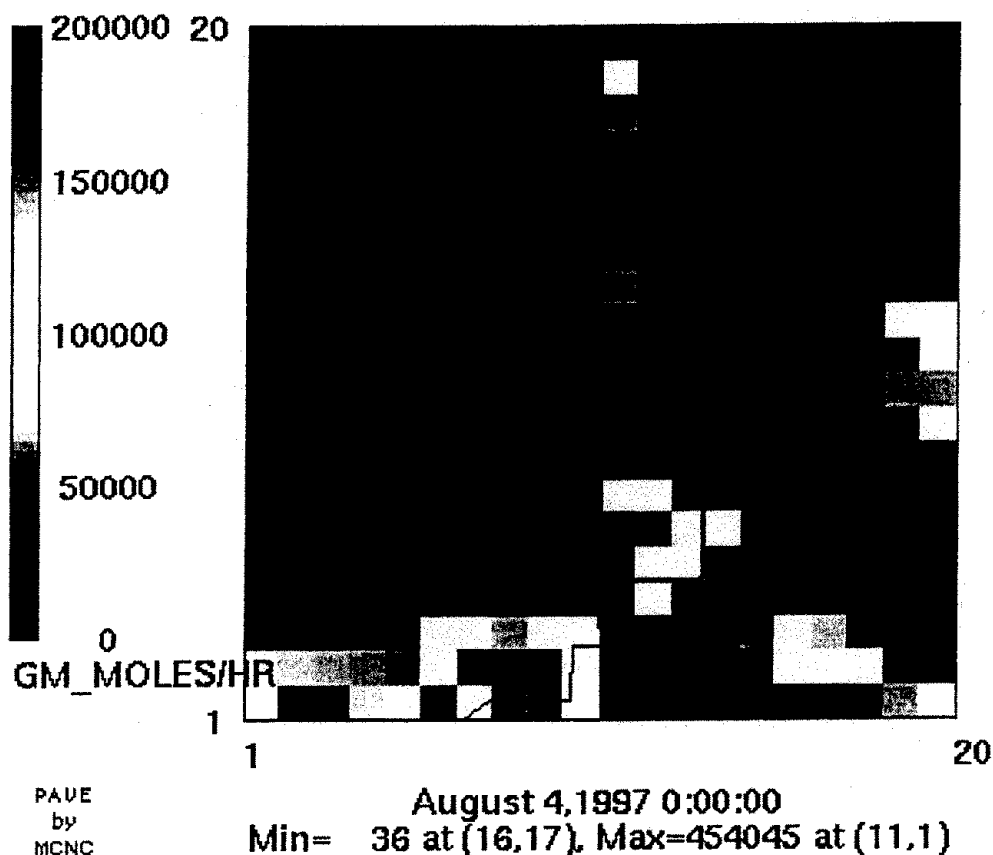


Figure 1-4. Spatial distribution of VOC emissions in the Santa Clarita Valley area and definition of the 9 5-km grid cells used to represent the Santa Clarita Valley area.

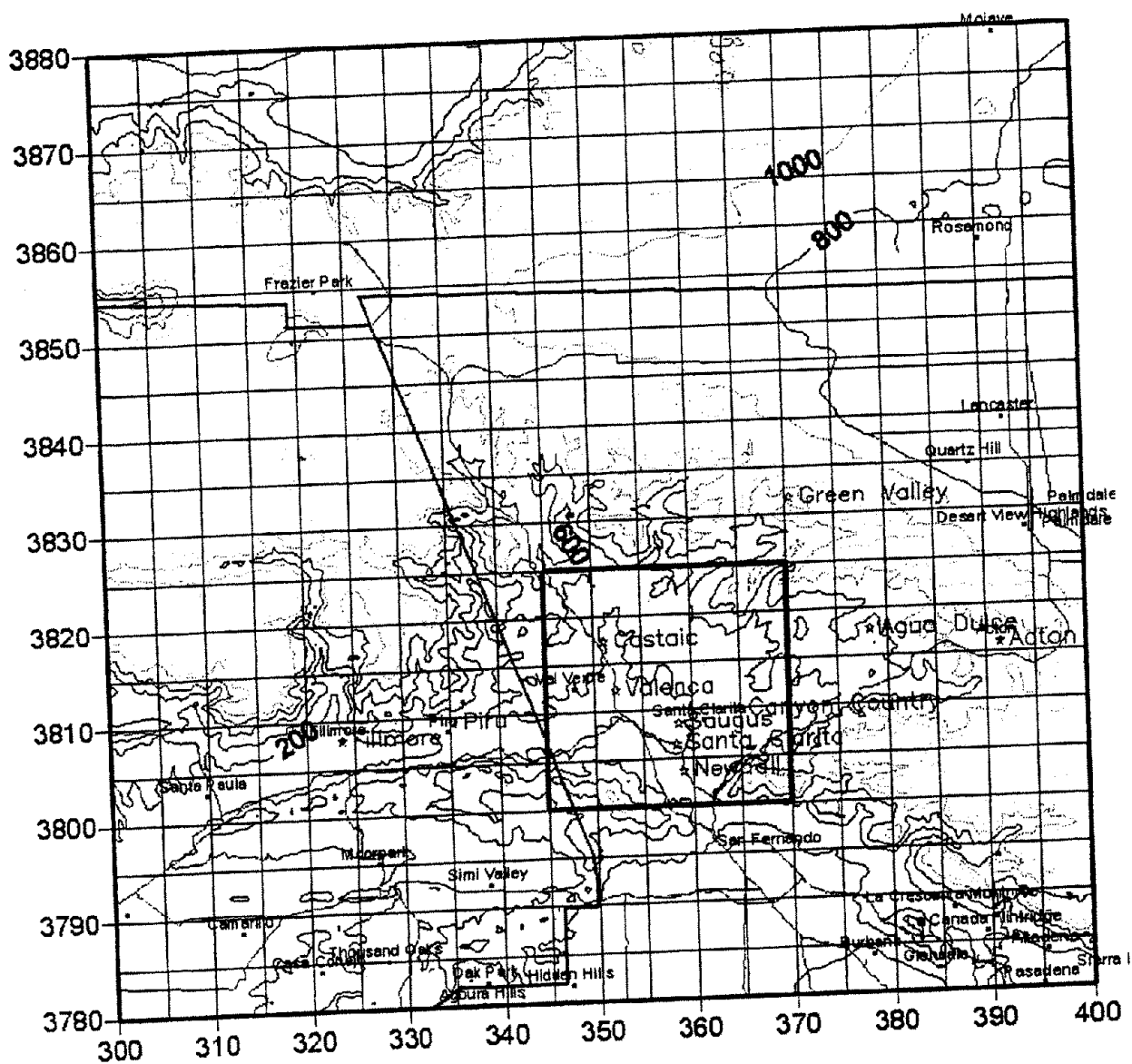


Figure 1-5. Cities, terrain heights and 5-km grid cell definitions in the subregion of the ozone/PM modeling domains that includes Santa Clarita and definition of the 25 5-km grid cells (red box) proposed to be used to represent the Santa Clarita Valley area.

Use of Photochemical Grid Models for Air Quality Planning

The ENVIRON Santa Clarita Valley and SCAQMD Santa Clarita Transport Studies both used Photochemical Grid Models (PGMs) (e.g., UAM and CAMx) to assess the contributions of local emissions on air quality in the Santa Clarita area. PGMs simulate the three-dimensional evolution of air quality within a modeling domain (e.g., Figure 1-1) solving numerical equations representing transport, diffusion, chemical transformation and deposition. The main inputs for a PGM consist of meteorology, emissions and boundary conditions (i.e., assumed concentrations entering the modeling domain). The steps in a PGM application typically consist of the following:

1. Selection of historical episode to be simulated.
2. Development of meteorological, emissions and boundary condition inputs for the historical episode.
3. Simulation of the episode year Base Case emissions scenario using the historical episode.
4. Comparison of the model estimated episode year Base Case concentration estimates against concurrent measured values in a model performance evaluation (MPE).
5. Assessment of whether model is replicating the observed concentrations well enough to proceed including comparison with EPA's model performance goals such as those for ozone (EPA, 1991; 1998) and PM (EPA, 2001). Make improvements to model inputs to improve model performance as necessary.
6. Develop new emission scenarios to assess air quality under different scenarios to answer specific questions, such as estimated air quality under future-year emission conditions or what would have air quality been like if specific emissions were eliminated.

Both the SCAQMD and ENVIRON transport studies used existing PGM databases that have already undergone steps 1 – 5 above, so just performed step 6. More specifically, the base case modeling and model performance evaluation for the ENVIRON Santa Clarita Valley Transport Study ozone and PM modeling can be found in reports by SCAQMD (2003) and Morris and Jia (2002), respectively.

2.0 OZONE MODELING RESULTS

To assess the effects of local emissions versus transport on 1-hour and 8-hour ozone concentrations in the Santa Clarita Valley area, the SCAQMD's August 3-7, 1997 Urban Airshed Model (UAM) database from the 2003 AQMP was used (SCAQMD, 2003). This is the same database reportedly used by the SCAQMD in their Santa Clarita Transport Study (J. Cassmassi, 2004, personal communication). The UAM is a three-dimensional photochemical grid model that simulates ozone formation using gridded emissions and meteorological inputs (Morris and Myers, 1990). Ozone is formed in the atmosphere through a complex set of nonlinear reactions involving oxides of nitrogen (NO_x) and Volatile Organic Compounds (VOC) (as well as Carbon Monoxide (CO) to a lesser extent) in the presence of sunlight.

EMISSIONS SCENARIOS ANALYZED

As noted in Section 1, three separate emission scenarios were analyzed for the 1997 and 2007 years:

- Base Case emissions scenario that represented actual emissions in 1997 and the 2003 AQMP control plan emissions in 2007;
- Santa Clarita Valley area 9-Grid Cell Zero-Out Case (designed to be similar to the area used in the SCAQMD Santa Clarita Transport Study); and
- Santa Clarita Valley area 25-Grid Cell Zero-Out Case (expanded definition of Santa Clarita Valley area).

Table 2-1 lists the total anthropogenic NO_x , VOC and CO emissions in the "SCOS" South Coast Air Basin domain (see Figure 1-1) for the three emission scenarios and two years analyzed. Anthropogenic NO_x , VOC and CO emissions in the 9-grid cell definition of the Santa Clarita Valley area represent 0.4% to 0.8% of the total emissions within the SCOS modeling domain. The 25-grid cell definition of the Santa Clarita Valley area contains 0.5% to 1.2% of the total emissions in the SCOS modeling domain.

There are substantial reductions in emissions in the SCOS modeling domain from the 1997 Base Case to the 2007 Base Case (i.e., 2003 AQMP Control Plan) with reductions in NO_x , VOC and CO emissions of approximately 30%, 40% and 60%, respectively. Emissions in the Santa Clarita Valley area contribute approximately 0.1% more to the total SCOS domain emissions in the 2007 Base Case emission scenario than in the 1997 Base Case.

Table 2-1. Summary of NO_x, VOC and CO anthropogenic emissions (tons per day, TPD) for the South Coast Air Basin "SCOS" domain (see Figure 1-1) for the 1997 and 2007 Base Case and 9-cell and 25-cell Santa Clarita Valley area Zero-Out Cases.

Scenario Species	Base Case	9-Grid Cell SCV Area			25-Grid Cell SCV Area		
		Emiss	Diff	%Diff	Emiss	Diff	%Diff
	(TPD)	(TPD)	(TPD)	(%)	(TPD)	(TPD)	(%)
1997 Emission Scenarios							
NOx	2318.4	2301.6	-16.8	-0.7%	2292.1	-26.3	-1.1%
VOC	2674.8	2665.4	-9.4	-0.4%	2661.2	-13.7	-0.5%
CO	19837.1	19762.9	-74.2	-0.4%	19722.5	-114.7	-0.6%
2007 Emission Scenarios							
NOx	1608.9	1596.74	-12.2	-0.8%	1589.68	-19.2	-1.2%
VOC	1543.6	1537.2	-6.4	-0.4%	1534.6	-9.0	-0.6%
CO	7407.1	7367.7	-39.4	-0.5%	7344.84	-62.2	-0.8%

OZONE MODELING RESULTS

Ozone modeling results are presented for both 1-hour and 8-hour ozone concentrations. The EPA has a Federal 1-hour ozone standard with a threshold of 0.12 ppm (120 ppb) that can be exceeded at a specific monitor no more than three days in three consecutive years. The Clean Air Act Amendments (CAAA) require that regions attain the Federal 1-hour ozone standard by specific years that are based on their attainment classification; the Federal 1-hour ozone attainment date for the South Coast Air Basin that includes the Santa Clarita Valley is 2010. The State of California has a 1-hour ozone standard with a threshold of 0.09 ppm (90 ppb). Regions in California must demonstrate progress toward achieving the California 1-hour ozone standard. There is also a new Federal 8-hour ozone standard with a threshold of 0.08 ppm (80 ppb) that is based on the three-year average of the fourth highest daily maximum 8-hour ozone concentration in three consecutive years. The State of California is considering the adoption of an 8-hour ozone standard with a threshold of 0.07 ppm (70 ppb).

The effects of the Santa Clarita Valley area Zero-Out Cases on 1-hour and 8-hour ozone concentrations using the August 1997 episode was examined using two definitions of the Santa Clarita Valley area:

- A 9-grid cell definition (3 x 3 5-km grid cells) of the Santa Clarita Valley area as shown by the red box in Figure 1-2; and
- A 25-grid cell definition (5 x 5 5-km grid cells) of the Santa Clarita Valley area as shown by the red box in Figure 1-5.

1-Hour Ozone Modeling Results

Table 2-2 and 2-3 display the peak 1-hour ozone concentrations for the 1997 and 2007 emissions scenarios, respectively, using the 9-grid cell and 25-grid cell definitions of the Santa Clarita Valley area. Spatial maps of daily maximum 1-hour ozone estimates for the northern South Coast Air Basin subdomain, the three emissions scenarios and the 1997 and 2007 years are given in Appendices A and B, respectively.

An examination of the spatial maps of daily maximum 1-hour ozone concentrations for the Base Case and two Santa Clarita Valley Zero-Out cases and the 1997 (Appendix A) and 2007 (Appendix B) years reveals that emissions in the Santa Clarita Valley area have little effect on the maximum 1-hour ozone concentrations in the Santa Clarita Valley area. For the 1997 emission scenarios, the complete elimination of all anthropogenic emissions in the 9-grid cell definition of the Santa Clarita Valley area reduces the estimated peak 1-hour ozone concentration in the northern South Coast Air Basin subdomain by 0.1 ppb, 0.5 ppb, and 2.0 ppb (i.e., 0.1%, 0.2% and 1.1%) on, respectively, August 5, 6, and 7, 1997 (Appendix A). Even when the expanded 25-grid cell definition of the Santa Clarita Valley area is used, the 1-hour peak ozone concentrations in the northern South Coast Air Basin domain are reduced only 0.4 ppb (0.3%) to 7.4 ppb (4.2%) when the Santa Clarita Valley area emissions are eliminated. The 1-hour peak ozone in the northern South Coast Air Basin subdomain on August 5th occurs west of Castaic at the Los Angeles/Ventura County line (Appendix A). On August 6th, the peak 1-hour ozone concentrations in the northern South Coast Air Basin subdomain occurs north of Piru on elevated terrain that lies west of the Santa Clarita Valley. On August 7th the peak 1-hour ozone concentration occurs on elevated terrain to the east of Santa Clarita Valley.

Tables 2-2 and 2-3 display the contributions of local Santa Clarita Valley area emissions versus transport for the peak 1-hour ozone concentrations within Santa Clarita Valley area using the 9-grid cell and 25-grid cell definitions of the Santa Clarita Valley area. The estimated 1-hour ozone peak is reduced by 0.1 ppb to 2.0 ppb (0.1% to 1.1%) and 1.1 ppb to 6.5 ppb (0.5% to 3.8%) when all anthropogenic emissions are eliminated in the, respectively, 9-grid cell and 25-grid cell definition of the Santa Clarita Valley area and using 1997 emissions (Table 2-2). Thus, for the 1997 emission scenarios emissions from outside the Santa Clarita Valley area (i.e. transport) contributes 95% or more to the peak 1-hour ozone concentrations in the Santa Clarita Valley area.

Larger reductions in the 1-hour ozone peaks are estimated using the 2007 (AQMP Control) emissions scenario, with reductions of 0.5 ppb to 7.7 ppb (0.4 % to 10.2%) and 0.8 ppb to 11.2 ppb (0.6% to 12.0%) estimated to occur using them 9-grid cell and 25-grid cell definitions of the Santa Clarita Valley area, respectively (Table 2-3). That is, for the 2007 emission scenarios ozone transport due to emissions outside of the Santa Clarita Valley area contributes > 92% and > 88%, respectively, of the peak 1-hour ozone concentrations in the Santa Clarita Valley area using the 9-grid cell and 25-grid cell definitions of the Santa Clarita Valley area, respectively.

It should be pointed out that the largest emissions reductions in the Santa Clarita Valley area due to local emission controls tend to occur on lower ozone days that are below the ozone standard. For example, the maximum reduction in the peak 1-hour ozone concentrations in the Santa Clarita Valley area that exceed the Federal 1-hour ozone standard is 3.8% and 0.8% for the 1997 and 2007 emissions scenarios, respectively.

Table 2-2. Estimated peak 1-hour ozone concentrations (ppb) for the 1997 Base Case and Santa Clarita Valley (SCV) area Zero-Out Cases and the 9-grid cell and 25-grid cell definitions of the SCV area (see Figures 1-3 and 1-5).

Date	1997 9-Grid Cell SCV Zero-Out				1997 25-Grid Cell SCV Zero-Out			
	Base Case	Zero-Out	Ozone Diff	Ozone Diff	Base Case	Zero-Out	Ozone Diff	Ozone Diff
	(ppb)	(ppb)	(ppb)	(%)	(ppb)	(ppb)	(ppb)	(%)
August 1997								
Aug 5	116.4	116.4	-0.1	-0.1%	116.0	113.1	-2.9	-2.5%
Aug 6	276.0	275.5	-0.5	-0.2%	221.3	220.2	-1.1	-0.5%
Aug 7	175.8	173.8	-2.0	-1.1%	172.6	166.1	-6.5	-3.8%

Table 2-3. Estimated peak 1-hour ozone concentrations (ppb) for the 2007 Base Case and Santa Clarita Valley (SCV) area Zero-Out Cases and the 9-grid cell and 25-grid cell definitions of the SCV area (see Figures 1-3 and 1-5).

Date	2007 9-Grid Cell SCV Zero-Out				2007 25-Grid Cell SCV Zero-Out			
	Base Case	Zero-Out	Ozone Diff	Ozone Diff	Base Case	Zero-Out	Ozone Diff	Ozone Diff
	(ppb)	(ppb)	(ppb)	(%)	(ppb)	(ppb)	(ppb)	(%)
August 1997								
Aug 5	75.4	67.7	-7.7	-10.2%	81.8	72.0	-9.9	-12.0%
Aug 6	132.4	131.9	-0.5	-0.4%	133.8	133.1	-0.8	-0.6%
Aug 7	108.1	102.6	-5.5	-5.1%	123.1	111.9	-11.2	-9.1%

8-Hour Ozone Modeling Results

Tables 2-4 and 2-5 display the effects of the Santa Clarita Valley area zero-out runs on peak 8-hour ozone concentrations in the Santa Clarita Valley area and vicinity. These results are qualitatively similar to the 1-hour ozone peak results. However, in the local Santa Clarita Valley area, for the 8-hour ozone peaks in the Santa Clarita Valley area, emissions sometimes have a negative contribution because the elimination of all anthropogenic emissions in the Santa Clarita Valley area results in a slight increase in the peak 8-hour ozone concentration in the Santa Clarita Valley area on some days. This is due to the elimination of the NO emissions in the Santa Clarita Valley area, which reduces ozone destruction through the ozone + NO titration reaction.

Table 2-4. Estimated peak 8-hour ozone concentrations (ppb) for the 1997 Base Case and Santa Clarita Valley (SCV) area Zero-Out Cases and the 9-grid cell and 25-grid cell definitions of the SCV area (see Figures 1-3 and 1-5).

Date	1997 9-Grid Cell SCV Zero-Out				1997 25-Grid Cell SCV Zero-Out			
	Base Case	Zero-Out	Ozone Diff	Ozone Diff	Base Case	Zero-Out	Ozone Diff	Ozone Diff
	(ppb)	(ppb)	(ppb)	(%)	(ppb)	(ppb)	(ppb)	(%)
August 1997								
Aug 5	76.3	69.5	-6.8	-9.0%	84.8	85.0	+0.2	+0.2%
Aug 6	145.3	145.3	+0.3	+0.2%	151.7	150.6	-1.1	-0.7%
Aug 7	102.9	103.0	+0.2	+0.2%	132.1	124.0	-8.1	-6.1%

Table 2-5. Estimated peak 8-hour ozone concentrations (ppb) for the 2007 Base Case and Santa Clarita Valley (SCV) area Zero-Out Cases and the 9-grid cell and 25-grid cell definitions of the SCV area (see Figures 1-3 and 1-5).

Date	2007 9-Grid Cell SCV Zero-Out				2007 25-Grid Cell SCV Zero-Out			
	Base Case	Zero-Out	Ozone Diff	Ozone Diff	Base Case	Zero-Out	Ozone Diff	Ozone Diff
	(ppb)	(ppb)	(ppb)	(%)	(ppb)	(ppb)	(ppb)	(%)
August 1997								
Aug 5	65.2	60.4	-4.8	-7.4%	68.3	63.3	-5.0	-7.3%
Aug 6	114.0	113.9	-0.1	-0.1%	119.2	118.6	-0.7	-0.6%
Aug 7	87.1	85.6	-1.4	-1.7%	102.5	94.6	-7.9	-7.7%

Summary of 1-Hour and 8-hour Ozone Modeling Results

Table 2-6 summarizes the contributions of local Santa Clarita Valley area emissions to peak 1-hour and 8-hour ozone concentrations in the Santa Clarita Valley area versus ozone that is due to emissions outside of the Santa Clarita Valley area and is transported into the area. Using the 1997 emissions, local Santa Clarita Valley area emissions are estimated to contribute less than 4% to the peak 1-hour ozone concentrations in the Santa Clarita Valley area; thus, transport is estimated to contribute over 96% to the peak 1-hour ozone concentrations in the Santa Clarita Valley area. Using the 2007 emissions, local Santa Clarita Valley area emissions are estimated to contribute 12% or less to the peak 1-hour ozone concentrations in 2007. Thus, in 2007, ozone transport contributes over 88% of the peak 1-hour ozone concentrations in the Santa Clarita Valley area in 2007.

For the 8-hour ozone peaks in the Santa Clarita Valley area, local emissions contribute -0.2% to 9.0% with transport contributing 91% to 100% under the 1997 and 2007 emission scenarios.

Table 2-6. Percent contribution of local emissions in the Santa Clarita Valley (SCV) area versus transport due to emissions from outside of the SCV area to peak 1-hour and 8-hour ozone concentrations in the SCV area using the 9-grid cell (3 x 3 5-km) and 25-grid cell (5 x 5 5-km) definitions of the SCV area.

Date	9-Grid Cell SCV Area			25-Grid Cell SCV Area		
	Peak Ozone	Local Emissions	Transport Emissions	Peak Ozone	Local Emissions	Transport Emissions
	(ppb)	(%)	(%)	(ppb)	(%)	(%)
1997 1-Hour Ozone Concentrations						
Aug 5	85.8	1.7%	98.3%	116.0	2.5%	97.5%
Aug 6	168.2	0.6%	99.4%	221.3	0.5%	99.5%
Aug 7	131.4	3.4%	96.6%	172.6	3.8%	96.2%
2007 1-Hour Ozone Concentrations						
Aug 5	75.4	10.2%	89.8%	81.8	12.0%	88.0%
Aug 6	132.4	0.4%	99.6%	133.8	0.6%	99.4%
Aug 7	108.1	5.1%	94.9%	123.1	9.1%	90.9%
1997 8-Hour Ozone Concentrations						
Aug 5	76.3	9.0%	91.0%	84.8	-0.2%	100.2%
Aug 6	145.3	-0.2%	100.2%	151.7	0.7%	99.2%
Aug 7	102.9	-0.2%	100.2%	132.1	6.1%	93.9%
2007 8-Hour Ozone Concentrations						
Aug 5	65.2	7.4%	93.6%	68.3	7.3%	92.7%
Aug 6	114.0	0.1%	99.9%	119.2	0.6%	99.4%
Aug 7	87.1	1.7%	98.3%	102.5	7.7%	92.3%

3.0 PM MODELING RESULTS

To assess the effects of local emissions versus transport on PM concentrations in the Santa Clarita Valley area, an April 1998 to May 1999 annual PM modeling database was used. This database corresponds to the period used in the SCAQMD's annual modeling as part of the Multiple Air Toxics Exposure Study (MATES-II) (SCAQMD, 2000) and a Department of Energy (DOE) study to assess the effects of biodiesel fuel use on PM in the South Coast Air Basin region of southern California (Morris and Jia, 2002). The Comprehensive Air-quality Model with extensions (CAMx) (ENVIRON, 2004), a photochemical grid model (PGM), was used to assess the contributions of local emissions versus transport to PM air quality in the Santa Clarita Valley area. The contributions of local emissions to both annual and 24-hour PM concentrations were assessed as well as for PM with geometric size less than 10 microns (PM_{10}) and 2.5 microns ($PM_{2.5}$). PM consists of primary emitted particles from combustion source, road dust, construction, wind blown dust, etc as well as secondary particles, such as sulfate, nitrate and secondary organic aerosols, that are formed in the atmosphere from gaseous pollutants. The contributions of local emissions versus transport was assessed accounting for both primary and secondary PM.

EMISSIONS SCENARIOS ANALYZED

Three separate PM emission scenarios were analyzed:

- Base Case emissions scenario that represented estimates of the actual emissions during the April 1998 to March 1999 year;
- Santa Clarita Valley Area 9-Grid Cell Zero-Out Case (designed to be similar to the study area used in the SCAQMD Santa Clarita Transport Study); and
- Santa Clarita Valley Area 25-Grid Cell Zero-Out Case (expanded definition of Santa Clarita Valley area).

Table 3-1 lists the total anthropogenic (man-made) NO_x , VOC, CO fine particulate ($PM_{2.5}$) and coarse particulate (PM_{10}) emissions in the "AQMP" South Coast Air Basin domain (see Figure 1-1) for the three emission scenarios and averaged over the winter 1999 and summer 1998 periods of the April 1998 through March 1999 modeling year. Anthropogenic NO_x , VOC CO, $PM_{2.5}$ and PM_{10} emissions in the 9-grid cell definition of the Santa Clarita Valley area represent 0.3% to 1.1% of the total emissions within the South Coast Air Basin AQMP modeling domain. The 25-grid cell definition of the Santa Clarita Valley area contains 0.5% to 1.7% of the total emissions in the AQMP modeling domain. Note that, for the PM modeling, the Santa Clarita Valley area emissions (Table 3-1) represent a larger fraction of the total emissions in the South Coast Air Basin than the ozone modeling (Table 2-1) because the PM modeling used the smaller "AQMP" domain compared to the ozone modeling that used the larger "SCOS" domain (see Figure 1-1).

Table 3-1. Summary of NO_x, VOC, CO, and fine (PM_{2.5}) and just the coarse mode (PM_{2.5-10}) component of PM₁₀ (PM_{2.5-10} = PM₁₀ – PM_{2.5}) mode particulate matter anthropogenic emissions (tons per day, TPD) for the South Coast Air Basin "AQMP" domain (see Figure 1-1) for the winter 1999 and summer 1998 Base Case and 9-cell and 25-cell Santa Clarita Valley (SCV) area Zero-Out Cases.

Scenario Species	Base Case	9-Grid Cell SCV Area			25-Grid Cell SCV Area		
		Emiss	Diff	%Diff	Emiss	Diff	%Diff
	(TPD)	(TPD)	(TPD)	(%)	(TPD)	(TPD)	(%)
1999 Winter Average							
NOx	1520.8	1503.6	-17.2	-1.1%	1495.1	-25.7	-1.7%
VOC	1461.2	1450.5	-10.7	-0.7%	1446.2	-14.9	-1.0%
CO	9291.7	9228.6	-63.1	-0.7%	9160.0	-95.7	-1.0%
PM _{2.5}	151.9	151.3	-0.6	-0.4%	150.9	-1.0	-0.6%
PM _{2.5-10}	851.1	848.4	-2.7	-0.3%	846.9	-4.2	-0.5%
1998 Summer Average							
NOx	1517.3	1501.2	-16.1	-1.1%	1492.7	-24.6	-1.6%
VOC	1500.3	1490.0	-10.3	-0.7%	1485.8	-14.5	-1.0%
CO	9874.3	9804.5	-70.0	-0.7%	9769.7	-104.6	-1.1%
PM _{2.5}	152.7	152.1	-0.6	-0.4%	151.7	-1.0	-0.6%
PM _{2.5-10}	855.3	852.6	-2.7	-0.3%	851.0	-4.2	-0.5%

PM MODELING RESULTS

Particulate Matter modeling results are presented for both PM₁₀ and PM_{2.5} concentrations. The EPA has a Federal annual and 24-hour average PM₁₀ standard with thresholds of 50 and 150 µg/m³, respectively. The CAAA require that PM₁₀ nonattainment areas attain the Federal PM₁₀ standard by specific years that are based on their attainment classification. The South Coast Air Basin, including the Santa Clarita Valley area, must attain the Federal PM₁₀ by 2006. The State of California also has annual and 24-hour PM₁₀ standards with thresholds of 20 and 50 µg/m³. Regions in California must demonstrate progress toward achieving the California PM₁₀ standards. There are also new Federal annual and 24-hour PM_{2.5} standards with thresholds of 15 and 65 µg/m³, respectively. EPA is planning to declare PM_{2.5} nonattainment areas by the end of 2005; the South Coast Air Basin, including the Santa Clarita Valley area, will be declared nonattainment for PM_{2.5}. The State of California also has an annual PM_{2.5} standard with a threshold of 12 µg/m³.

The effects of the Santa Clarita Valley area Zero-Out Cases on annual and 24-hour PM₁₀ and PM_{2.5} concentrations in the April 1998 to March 1999 annual modeling database for the South Coast Air Basin were assessed using the two definitions of the Santa Clarita Valley area:

- The 9-grid cell definition (3 x 3 5-km grid cells) of the Santa Clarita Valley area as shown by the red box in Figure 1-2; and
- The 25-grid cell definition (5 x 5 5-km grid cells) of the Santa Clarita Valley area as shown by the red box in Figure 1-5.

Annual and 24-Hour PM Modeling Results

Table 3-2 displays the maximum annual average PM₁₀ and PM_{2.5} concentrations in the Santa Clarita Valley area for the 1998/1999 Base Case and two Santa Clarita Valley area Zero-Out Cases using the 9-grid cell (smaller) and 25-grid cell (larger) definitions of the Santa Clarita Valley area. Spatial maps of annual average PM₁₀ and PM_{2.5} concentration estimates for the northern South Coast Air Basin subdomain and the Base Case and two Santa Clarita Valley area Zero-Out Cases are shown Appendix C. The peak annual PM₁₀ concentration in the Santa Clarita Valley area is 35.1 µg/m³ using both the larger (25-grid cell) and smaller (9-grid cell) definitions of the Santa Clarita Valley area. The elimination of all anthropogenic emissions in the Santa Clarita Valley area reduces the peak annual average PM₁₀ concentration in the Santa Clarita Valley area by 5.2 µg/m³ and 5.7 µg/m³ using the smaller and larger definitions of the Santa Clarita Valley area, respectively. These reductions represent 10% and 11% of the Federal annual PM₁₀ standard of 50 µg/m³.

The elimination of all anthropogenic emissions in the Santa Clarita Valley area reduces the maximum annual average PM_{2.5} concentration estimate in the Santa Clarita Valley area by 2.8 and 3.2 µg/m³ using the smaller and larger definitions of the Santa Clarita Valley area, respectively. These reductions represent approximately 20% of the Federal annual average PM_{2.5} standard of 15 µg/m³.

Table 3-2. Estimated peak annual average PM₁₀ and PM_{2.5} concentrations (µg/m³) for the 1998/1999 Base Case and Santa Clarita Valley (SCV) Zero-Out Cases using the 9-grid cell and 25-grid cell definitions of the Santa Clarita Valley area.

Species	9-Grid Cell SCV Zero-Out				25-Grid Cell SCV Zero-Out			
	Base Case	Zero-Out	PM Diff	PM Diff	Base Case	Zero-Out	PM Diff	PM Diff
	(µg/m ³)	(µg/m ³)	(µg/m ³)	(%)	(µg/m ³)	(µg/m ³)	(µg/m ³)	(%)
PM ₁₀	35.1	29.9	-5.2	-14.9%	35.1	29.4	-5.7	-16.1%
PM _{2.5}	17.2	14.5	-2.8	-16.0%	17.2	14.0	-3.2	-18.7%

The spatial maps of annual average PM₁₀ and PM_{2.5} concentrations in Appendix C indicate why the Santa Clarita Valley area Zero-Out Cases have minimal effect on PM levels in the Santa Clarita Valley area. There are large PM concentration gradients from south to north with much higher PM concentrations seen in the San Fernando Valley, that exceed the Federal annual standard of 50 µg/m³, and lower levels that are below 40 µg/m³ occurring in the Santa Clarita area. These spatial maps of estimate PM concentrations clearly show the transport of PM concentrations from the southern areas of the San Fernando Valley and Los Angeles into the Santa Clarita Valley area.

Table 3-3 lists the contribution of local emissions in the Santa Clarita Valley area and the contribution from transport due to emissions from outside of the Santa Clarita Valley area to the maximum annual average PM₁₀ and PM_{2.5} in the Santa Clarita Valley area. Also shown in Table 3-3 are the local versus transport contributions to the maximum 24-hour average PM₁₀ and PM_{2.5} concentrations in the Santa Clarita Valley area for the four highest days of the 1998/1999 year. Using the smaller definition of the Santa Clarita Valley area, local emissions contribute approximately 15% and 16% to the maximum annual average PM₁₀ and PM_{2.5} concentrations in the Santa Clarita Valley area, respectively. When the larger cell definition of the Santa Clarita

Valley area is used, the contribution of local emissions to the annual average PM₁₀ and PM_{2.5} concentrations in the Santa Clarita Valley area are approximately 16% and 19%, respectively.

The contributions of local emissions to the four highest 24-hour PM₁₀ concentrations in the Santa Clarita Valley area ranges from 5% to 14%. Local Santa Clarita Valley area emissions have a lower contribution to the four highest 24-hour PM_{2.5} concentrations in the Santa Clarita Valley area with local contributions ranging from 2% to 7%. Local emissions have a lower relative contribution to PM_{2.5} than PM₁₀ concentrations because PM formed by pollution in the air is mostly fine and contributes more to transport; PM_{2.5} does not deposit out as fast as PM₁₀ and so has a longer transport distance.

Table 3-3. Percent contribution of local emissions in the Santa Clarita Valley (SCV) area versus transport due to emissions from outside of the SCV area to peak annual average PM₁₀ and PM_{2.5} concentrations and four-highest 24-hour PM₁₀ and PM_{2.5} concentrations in the SCV area during the May 1998 to April 1999 year using the 9-grid cell (3 x 3 5-km) and 25-grid cell (5 x 5 5-km) definitions of the SCV area.

Species Or Date	9-Grid Cell SCV Area			25-Grid Cell SCV Area		
	Peak PM	Local Emissions	Transport Emissions	Peak PM	Local Emissions	Transport Emissions
	(g/m ³)	(%)	(%)	(g/m ³)	(%)	(%)
Annual Average PM Concentrations						
PM ₁₀	35.1	14.9%	85.1%	35.1	16.1%	83.9%
PM _{2.5}	17.2	16.0%	84.0%	17.2	18.7%	81.3%
Four Highest 24-Hour PM₁₀ Concentrations						
12/01/98	149.0	13.5%	86.5%	149.0	10.5%	89.5%
11/27/98	143.9	4.7%	95.3%	143.9	4.9%	95.1%
01/07/99	114.5	10.2%	89.8%	119.0	4.3%	95.7%
01/06/99	113.4	10.4%	89.6%	113.4	11.1%	88.9%
Four Highest 24-Hour PM_{2.5} Concentrations						
12/01/98	79.9	7.3%	92.7%	80.0	4.7%	95.3%
11/27/98	68.5	2.3%	97.7%	69.4	2.5%	97.5%
10/12/98	64.9	5.0%	95.0%	68.6	5.3%	94.7%
01/07/99	60.8	3.0%	97.0%	69.9	1.9%	98.1%

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APPENDIX A

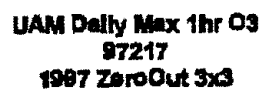
Daily Maximum 1-Hour Ozone Concentrations (ppb)

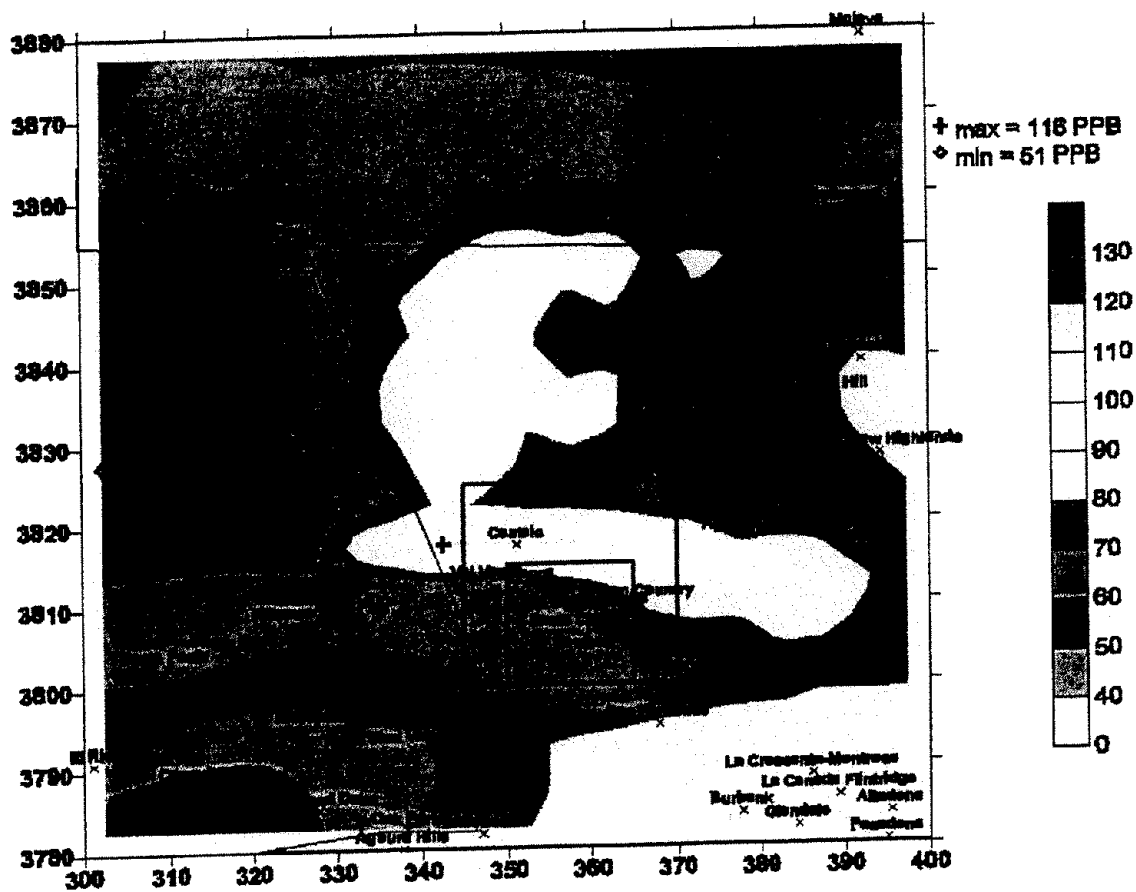
1997 Emission Scenarios

- Base Case
- 9-grid cell (3 x 3) Santa Clarita Valley area Zero-Out Case
- 25-grid cell (5 x 5) Santa Clarita Valley area Zero-Out Case

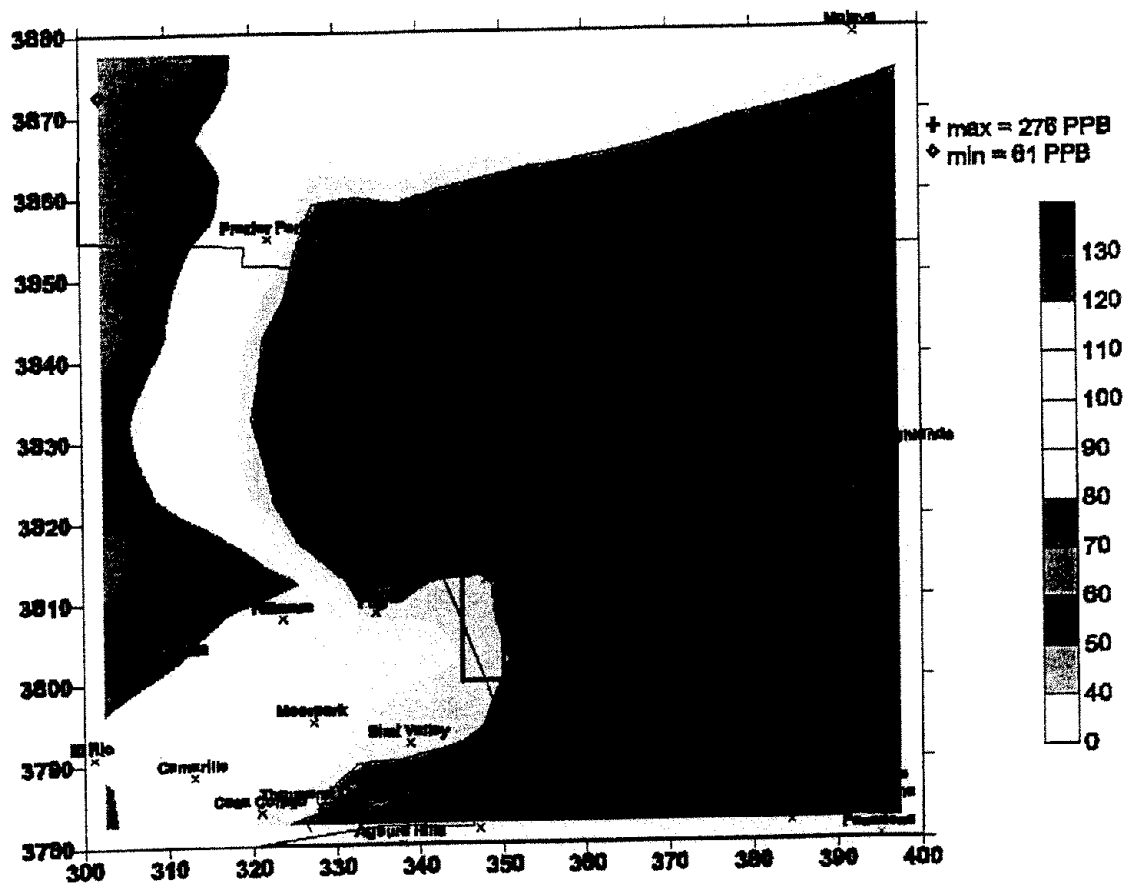
August 5-7, 1997

- August 5, 1997 (97217)
- August 6, 1997 (97218)
- August 7, 1997 (97219)

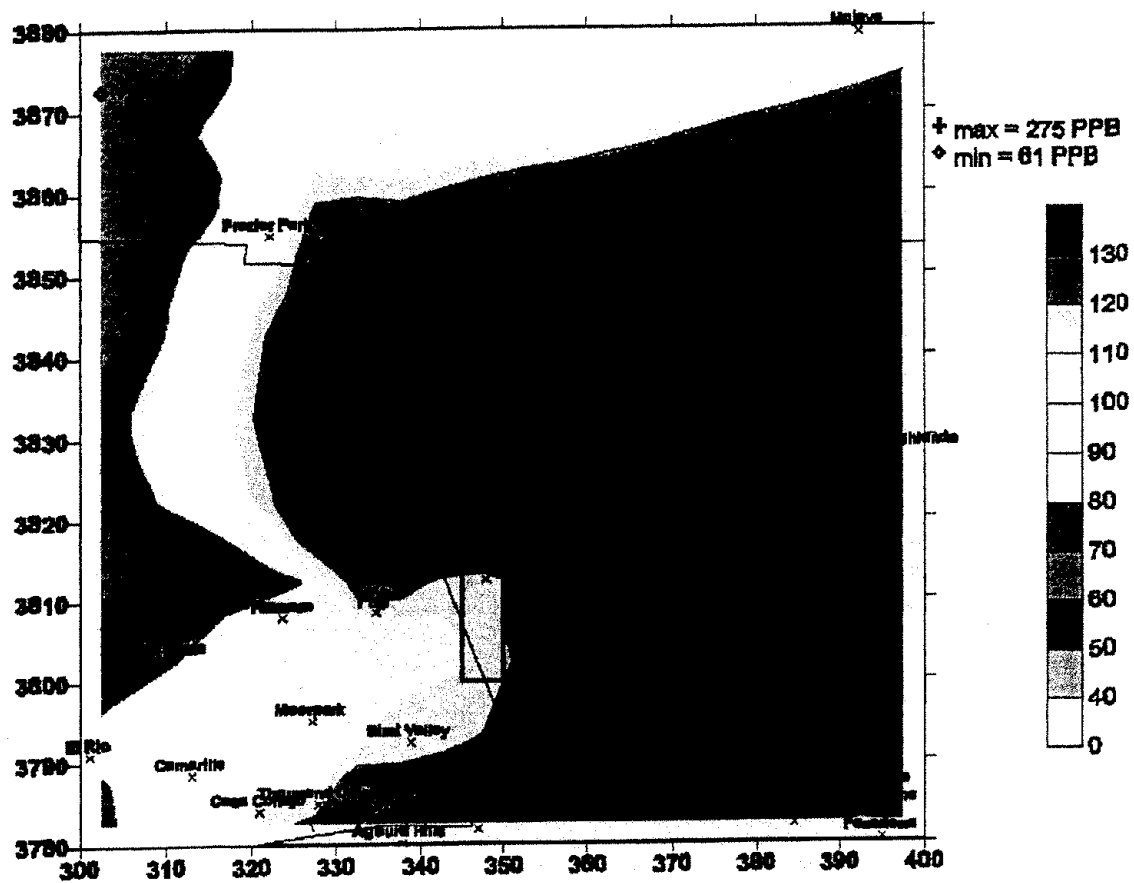




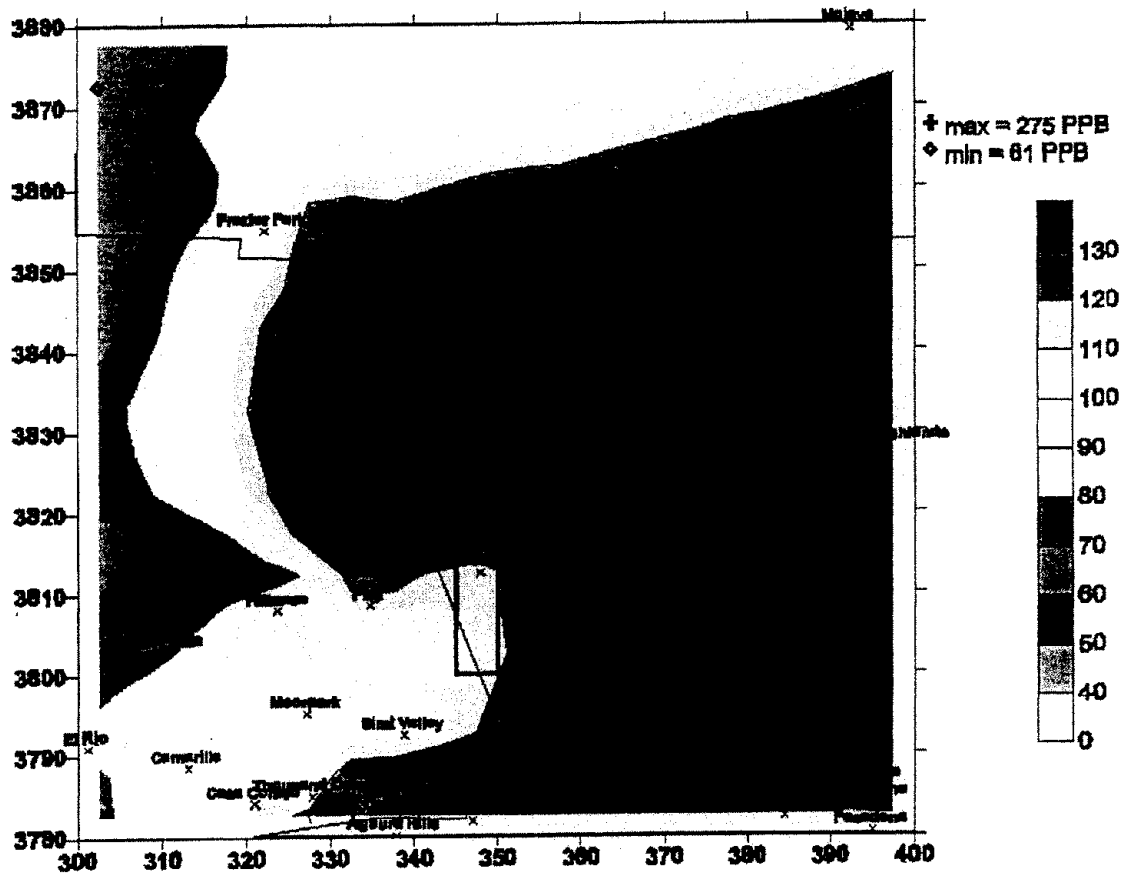
UAM Daily Max 1hr O3
 97217
 1997 ZeroOut 5x5



UAM Daily Max 1hr O3
 97218
 1997 Base Case

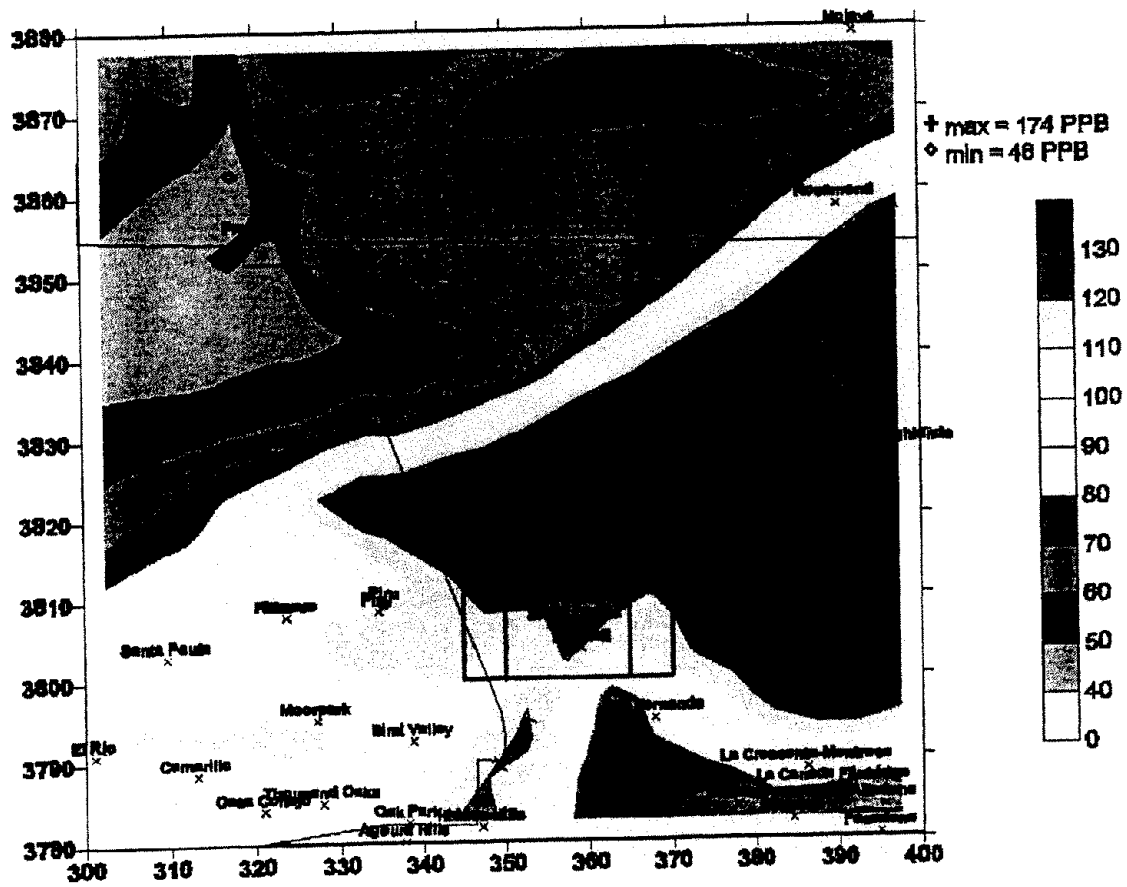


UAM Daily Max 1hr O3
 97218
 1997 ZeroOut 3x3

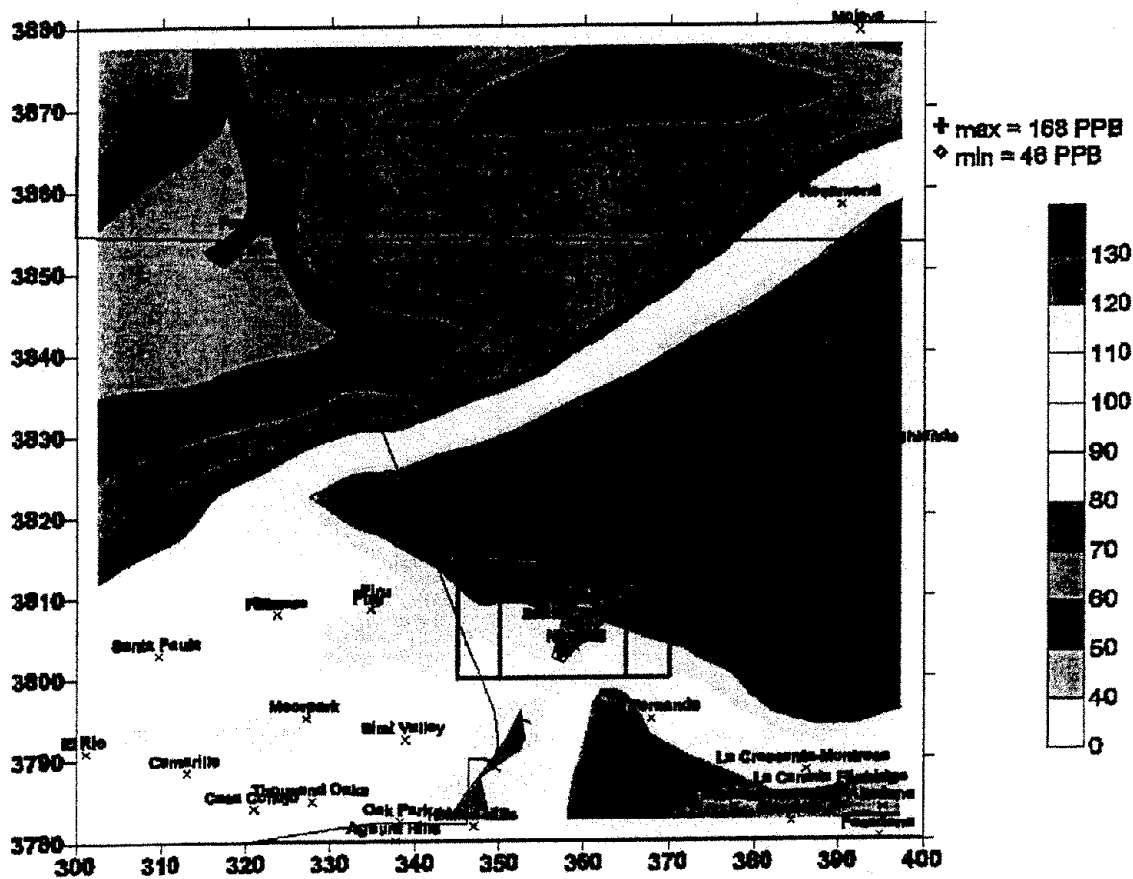


UAM Daily Max 1hr O3
 97218
 1997 ZeroOut 5x5





UAM Daily Max 1hr O3
 97219
 1997 ZeroOut 3x3



UAM Daily Max 1hr O3
 97219
 1997 ZeroOut 5x5

APPENDIX B

Daily Maximum 1-Hour Ozone Concentrations (ppb)

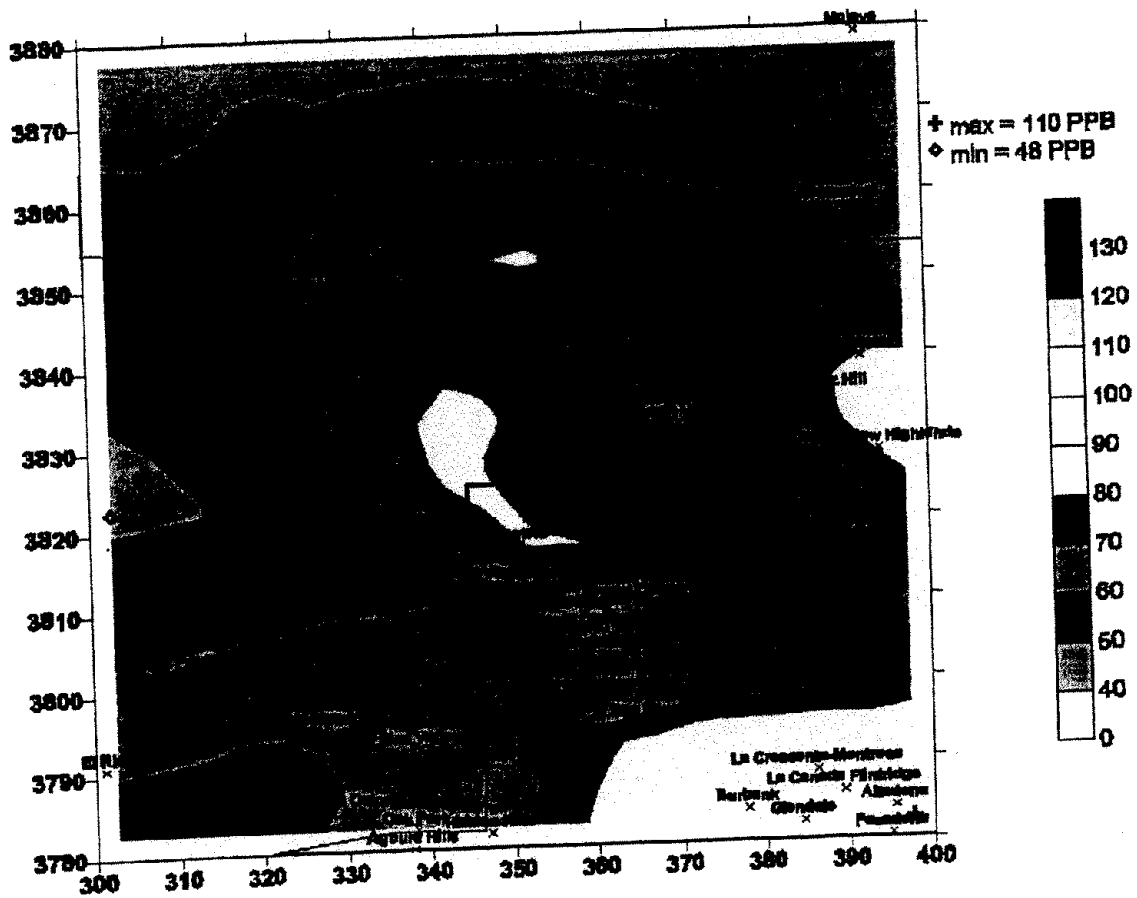
2007 Emission Scenarios

- Base Case
- 9-grid cell (3 x 3) Santa Clarita Valley area Zero-Out Case
- 25-grid cell (5 x 5) Santa Clarita Valley area Zero-Out Case

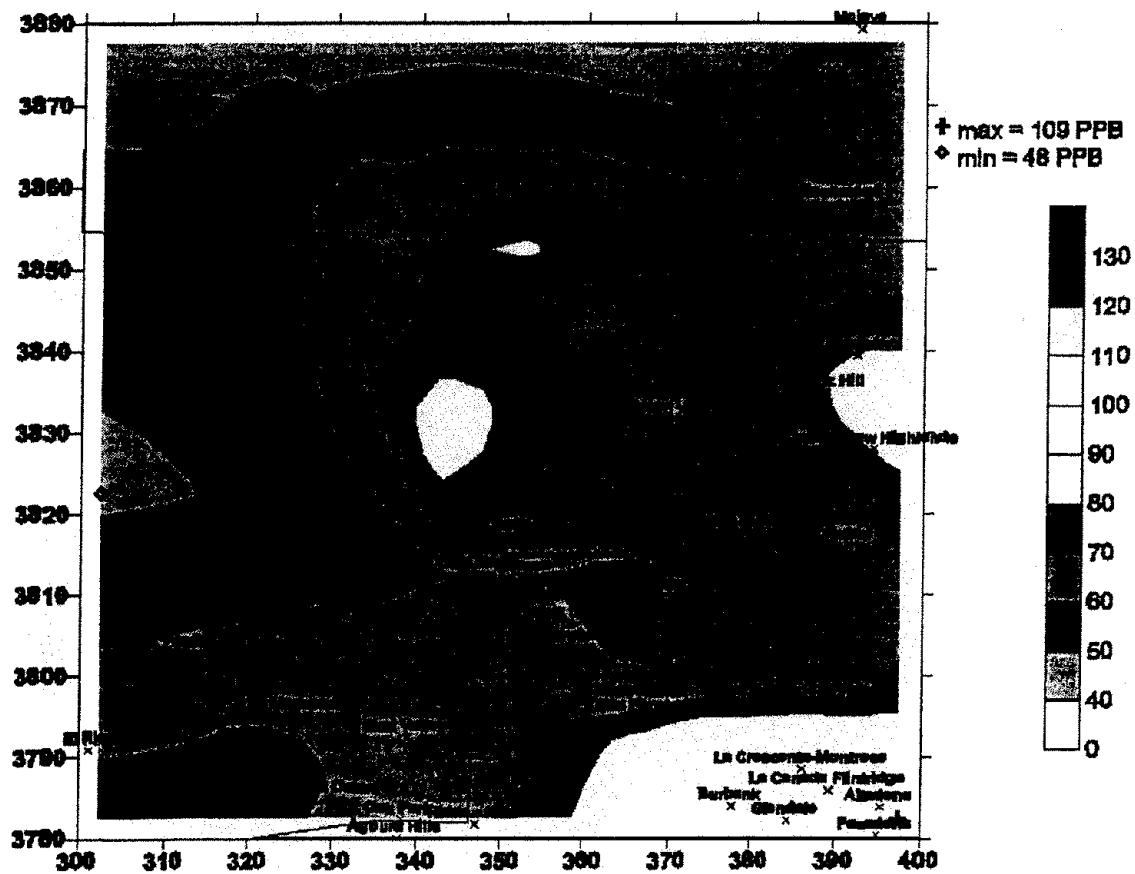
August 5-7, 1997

- August 5, 1997 (97217)
- August 6, 1997 (97218)
- August 7, 1997 (97219)

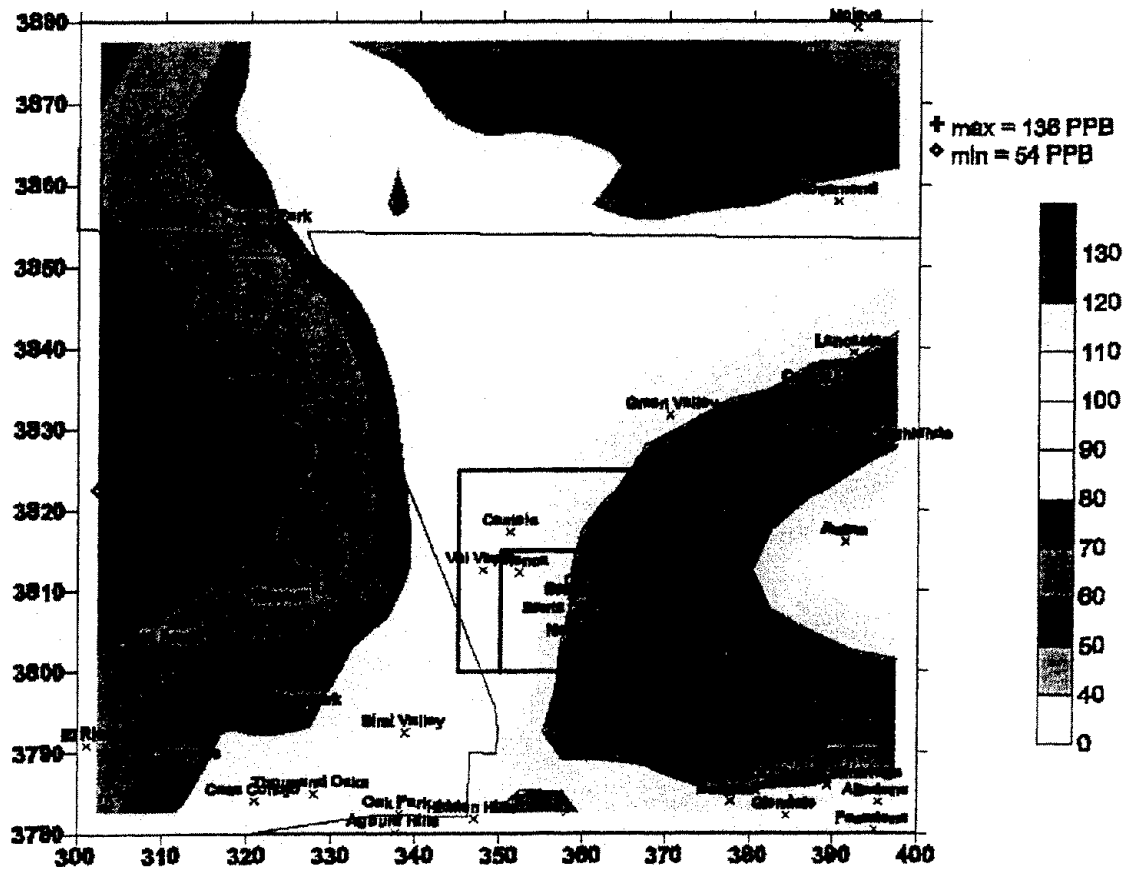




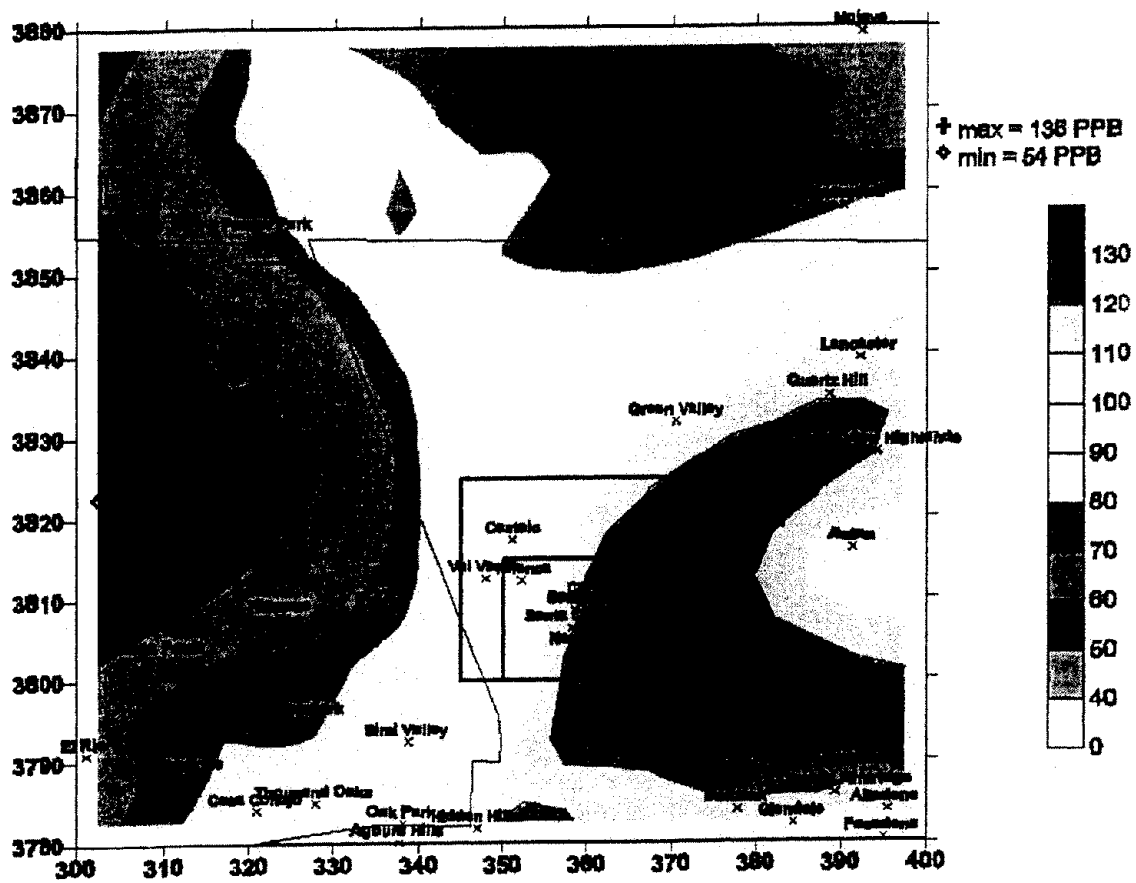
UAM Daily Max 1hr O3
 97217
 2007 ZeroOut 3x3



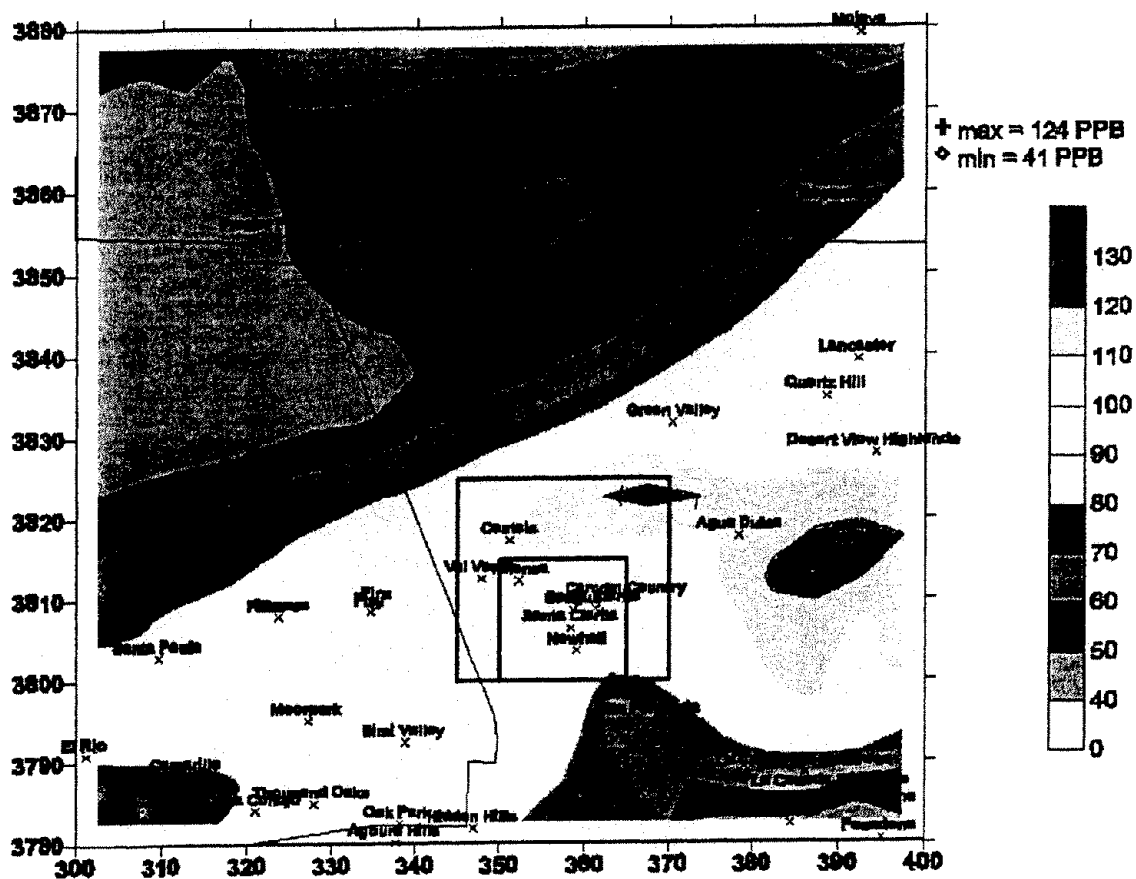
UAM Daily Max 1hr O3
 97217
 2007 ZeroOut 5x5



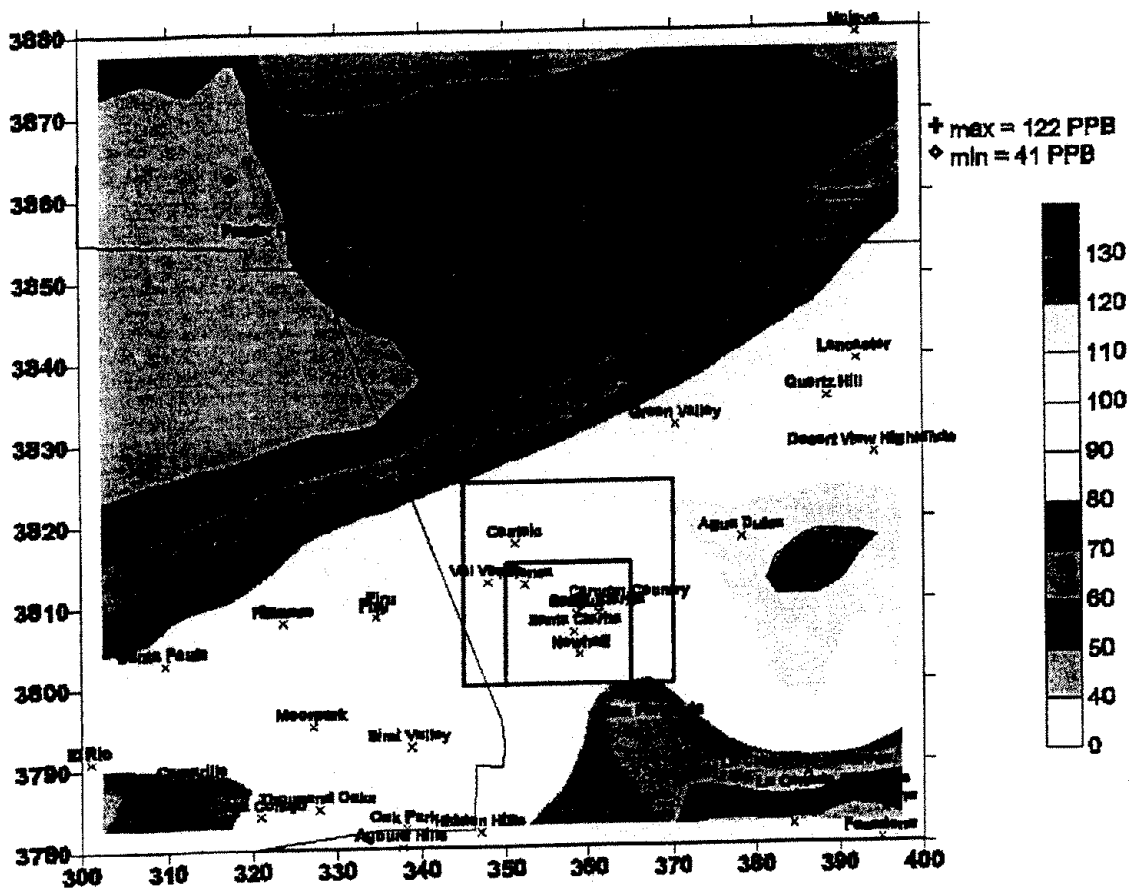
UAM Daily Max 1hr O3
 97218
 2007 Base Case



UAM Daily Max 1hr O3
 97218
 2007 ZeroOut 3x3



UAM Daily Max 1hr O3
 97219
 2007 Base Case



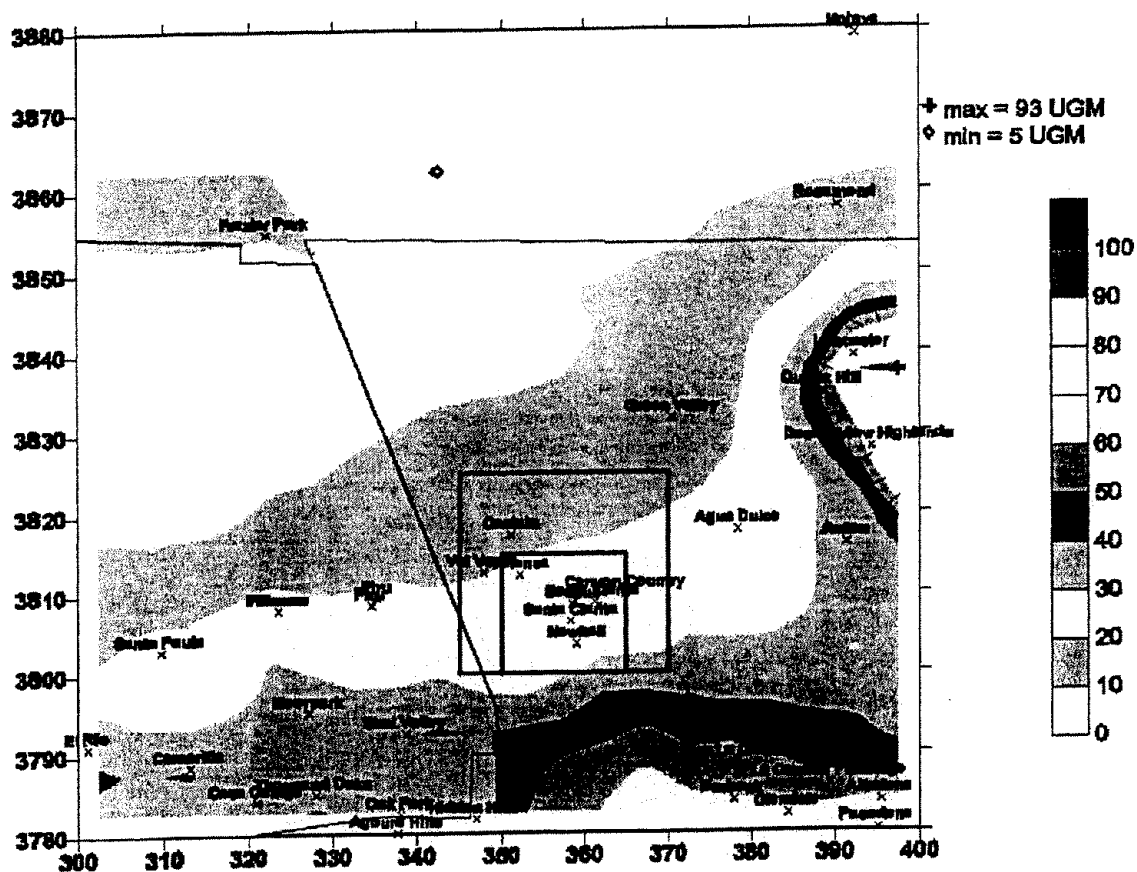
UAM Daily Max 1hr O3
 97219
 2007 ZeroOut 5x5

APPENDIX C

Annual Average PM₁₀ and PM_{2.5} Concentrations (ug/m³)

1998/1999 Emission Scenario

- Base Case
- 9-grid cell (3 x 3) Santa Clarita Valley area Zero-Out Case
- 25-grid cell (5 x 5) Santa Clarita Valley area Zero-Out Case



CAMx Annual PM10
 April 1998 - March 1999
 Base Case without Anthropogenic Emissions from a 5x5 Block over Santa Clarita Valley



APPENDIX D

Fiscal Issues

NEWHALL RANCH
WESTSIDE COMMUNITIES
FISCAL IMPACT ANALYSIS:
LOS ANGELES COUNTY
CALIFORNIA

Prepared for:
NEWHALL LAND AND FARMING COMPANY

Prepared by:
ALLAN D. KOTIN & ASSOCIATES , AND
CBRE CONSULTING

SEPTEMBER 2006

ALLAN D. KOTIN & ASSOCIATES

| CBRE CONSULTING

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September 19, 2006

Mr. Genji Nakata
Newhall Land and Farming Company
23823 Valencia Boulevard
Valencia, California 91355

Re: Fiscal Impact Analysis of Proposed Newhall Land Westside Communities Development

Dear Mr. Nakata:

Allan D. Kotin & Associates and CBRE Consulting are pleased to submit this report regarding the fiscal impact of the proposed development of the Westside Communities in Los Angeles County, California which has been prepared at the joint request of your company and the Chief Administrative Officer of Los Angeles County. The report discusses the proposed Project's marginal net fiscal impact on the County of Los Angeles resulting from the development being undertaken in an unincorporated area of the County, as opposed to an incorporated area.

Please note that the research for this analysis was completed in July 2006. Accordingly, we assume no responsibility for events or circumstances pertinent to the development or Los Angeles County's fiscal circumstances occurring after that date.

It has been a pleasure working with you on this assignment. Please let us know if you have any questions or additional needs.

Sincerely,

Allan D. Kotin
Principal

Ross S. Selvidge, Ph.D.
Managing Director

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I. EXECUTIVE SUMMARY

INTRODUCTION

The purpose of this Study is to estimate a portion of the net fiscal impact on Los Angeles County ("County") of the development of the 3,294 gross acres of land ("Project") in an unincorporated portion of the County in the vicinity of the Santa Clarita Valley and currently owned by Newhall Land and Farming Company ("Newhall Land"). The Study was undertaken at the joint request of Newhall Land and the County.

The Study focuses on the revenues the County will receive and expenses that the County will incur as a result of the proposed Project being developed in an unincorporated area of the County rather than in an incorporated city. Consequently, this Study excludes both revenues that the County receives and the expenditures that the County must incur on a County-wide basis, i.e., in both incorporated and unincorporated areas of the County.

The Study also estimates the one-time economic impacts of developing the Project on both Los Angeles County and Ventura County. These impacts were measured in terms of dollar output, payroll, jobs, and taxes.

The research for the Study was completed in July 2006 based largely on information provided during the first quarter of 2006. Accordingly, Allan D. Kotin & Associates and CBRE Consulting assume no responsibility for changed market conditions events or changes in Los Angeles County's fiscal circumstances occurring after that date.

The study deals only with the operating impacts of the Project. Capital costs for required infrastructure are not considered although the maintenance of such infrastructure and the impact of infrastructure timing on operating costs are both considered.

SUMMARY OF FINDINGS

Project Description and Impact Area

Upon completion the proposed Project will consist of a wide range of residential and non-residential products. The Project will be divided into seven communities, sometimes referred to as the Westside Communities, each with a different mix of products. A total of 27,893 residential units and 10.9 million square feet of non-residential improvements are planned. The first project components would be completed in 2009 with the final components completed in 2025. The projected resident population of the completed project is 74,250. It is estimated that a total of 32,400 employees will work in the project. The breakdown by major product type for the entire Project and each community is shown in Figure 1.

Figure 1
Development Program

	Entrada	Homestead	Potrero	Mission Village	Legacy	Landmark	Commerce Center	Project Total
Residential Units								
Owner-Occupied	2,827	5,488	7,908	4,285	2,741	993	0	24,950
Rental	708	187	520	1,046	739	451	0	3,651
Combined	3,535	5,675	8,428	5,331	3,480	1,444	0	27,893
Non-Residential SF								
Retail	1,543,625	27,500	628,500	314,850	170,000	94,199	300,715	3,079,389
Office	1,173,150	132,500	628,500	984,150	316,000	279,502	1,159,795	4,673,597
Other incl. Hotel	170,024	0	0	0	0	0	0	170,024
Industrial R&D	115,214	1,090,000	0	0	0	0	1,739,490	2,944,706
Combined	3,002,013	1,250,000	1,257,000	1,299,000	486,000	373,701	3,200,000	10,867,716

The impact area with which this Study deals is the unincorporated area of the County, west of Interstate 5 and north of the City of Los Angeles. Those areas include the developed areas known as Stevenson Ranch and Westridge, as well as the area around Magic Mountain. Exhibits 1 and 2 identify the location of the seven communities in the Project and the adjacent impact areas.

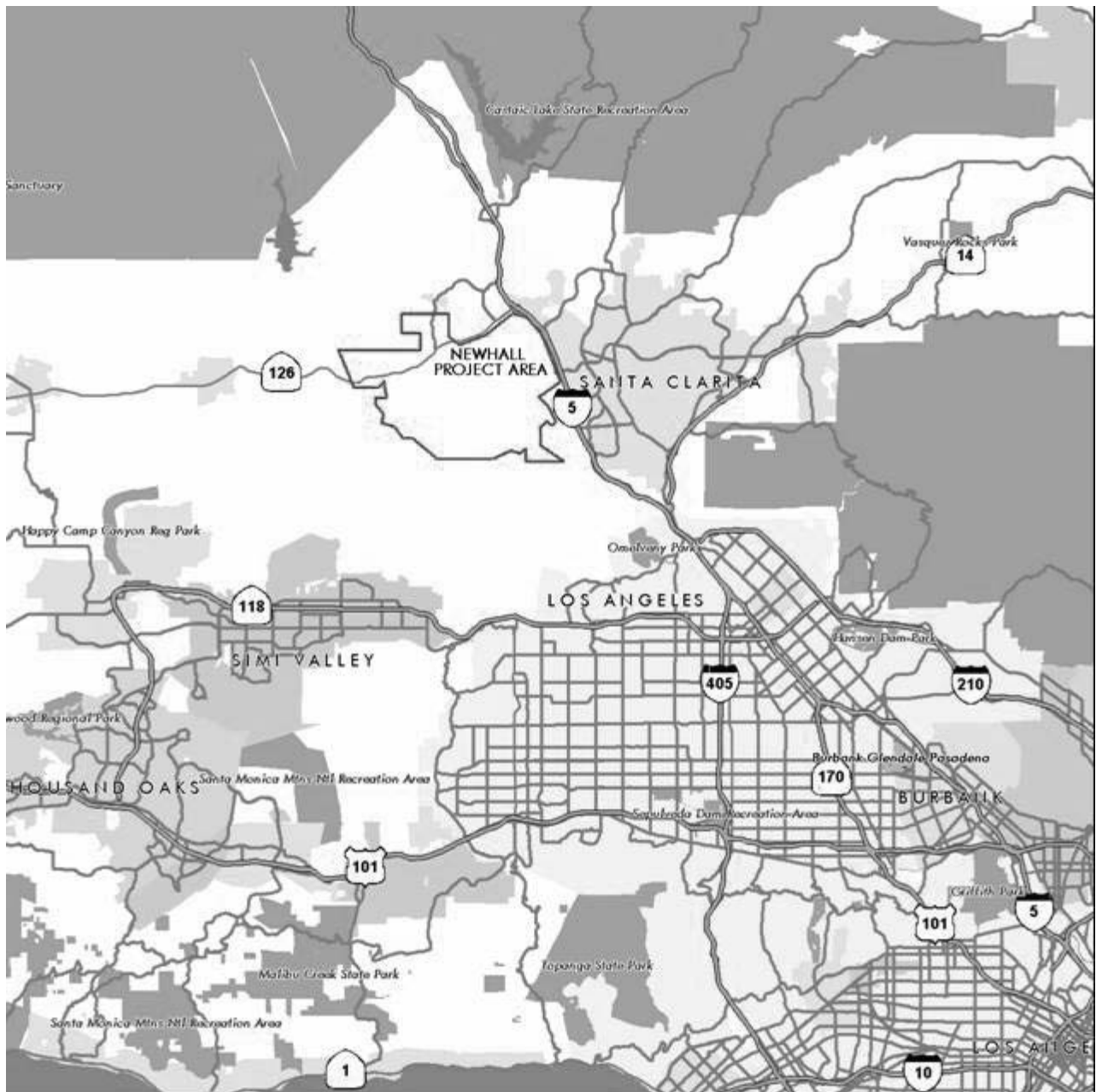
The annual net fiscal impact to the County was estimated on an annual basis in uninflated 2006 dollars for the entire 16-year build-out schedule. Principally because of the need to have a full fire station in place and operating at that point, the Project is projected to have a negative net fiscal impact, i.e. a deficit, in the second year. The net fiscal impact returns to positive, i.e., a surplus, in the third year and by the fifth year the annual surplus is projected to reach approximately \$10.7 million. The net fiscal impact is estimated to reach \$33.9 million in 2017 and \$41.1 million in 2021. Upon completion of the build-and by 2025, the net fiscal impact is estimated to reach at approximately \$42.3 million. The projected annual revenues and expenditures at five points in time during the build-out are shown in Figure 2 and are presented in more detail in Exhibit 3.

Figure 2
Total Annual Fiscal Impact (000)

	2009	2013	2017	2021	2025
Revenues	\$1,412	\$26,493	\$66,448	\$78,530	\$80,394
Expenditures	\$682	\$15,802	\$32,540	\$37,475	\$38,047
Net	\$730	\$10,691	\$33,908	\$41,055	\$42,347

The surplus that emerges as the Project reaches full build-out is attributable to a combination of factors. The County's various shares of the property tax in the Project area is relatively large and the properties will have relatively high assessed values because they will be going on the tax rolls at full market value. This produces a high level of revenues per resident or employee. In addition, a substantial amount of annual maintenance services that the County (or a city) might otherwise have to provide and fund are effectively being privatized or internalized by the Project through funding from homeowners associations or special tax or assessment districts. Annual maintenance of roadways is an example of services that will be funded in part from those alternative sources and reduce what would otherwise be County funding obligations.

Exhibit 1: Project Area Regional Context



Source: CB Richard Ellis

SEPTEMBER 2006

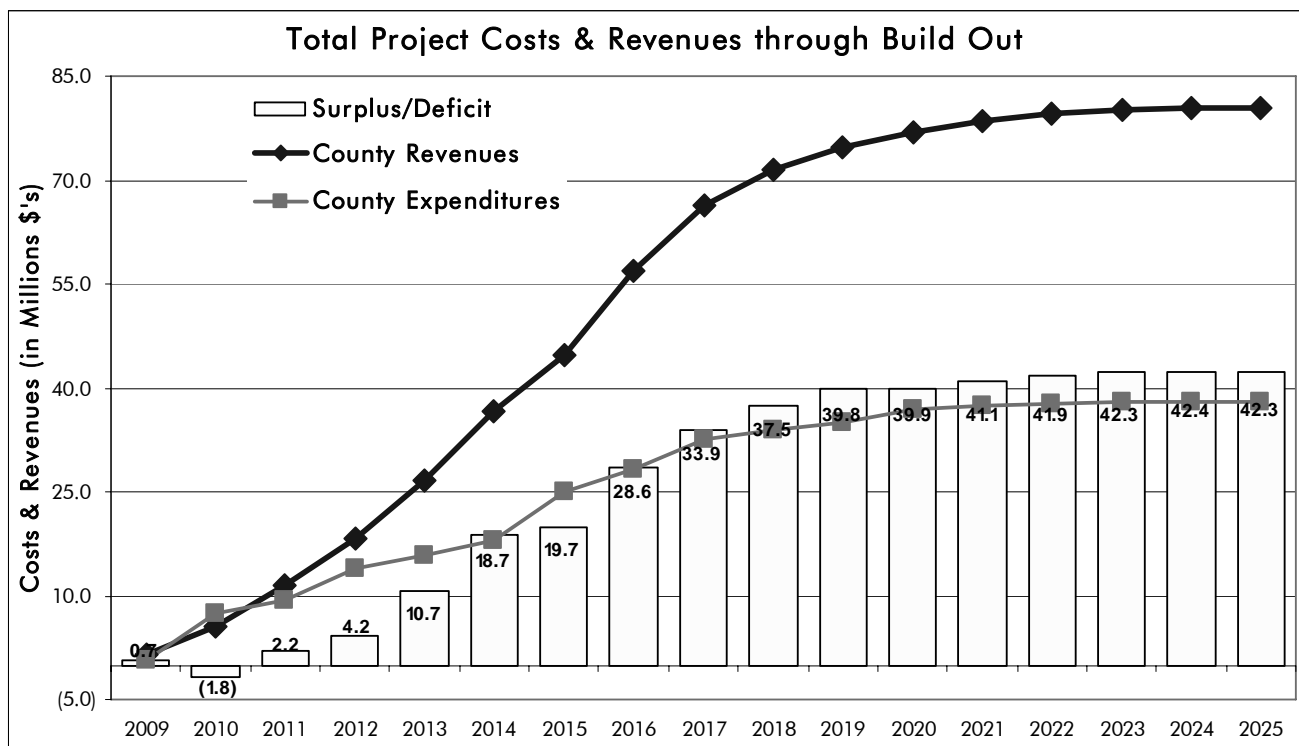
Exhibit 3

Summary of Revenues and Expenditures at 4-year Intervals

Expenditure/Revenue Items	Expenditures/Revenues in \$ 000's					As Percentage of Total Revenues/Expenditures				
	2009	2013	2017	2021	2025	2009	2013	2017	2021	2025
REVENUES	\$1,412	\$26,493	\$66,448	\$78,530	\$80,394	100.0%	100.0%	100.0%	100.0%	100.0%
Property - General Levy	1,091	20,620	49,645	60,473	62,207	77.2%	77.8%	74.7%	77.0%	77.4%
Property - Special Taxes	40	788	1,893	2,322	2,401	2.8%	3.0%	2.8%	3.0%	3.0%
Retail Sales Tax	48	1,951	7,203	7,734	7,825	3.4%	7.4%	10.8%	9.8%	9.7%
Utility User Tax	57	1,699	4,414	5,167	5,300	4.0%	6.4%	6.6%	6.6%	6.6%
Transient Occupancy	0	0	1,232	1,232	1,232	0.0%	0.0%	1.9%	1.6%	1.5%
Documentary Transfer	166	1,262	1,665	1,101	908	11.7%	4.8%	2.5%	1.4%	1.1%
Franchise Fee	11	173	395	502	520	0.8%	0.7%	0.6%	0.6%	0.6%
EXPENDITURES	\$682	\$15,802	\$32,540	\$37,476	\$38,047	100.0%	100.0%	100.0%	100.0%	100.0%
Sheriff's	291	4,399	10,036	12,743	13,200	42.6%	27.8%	30.8%	34.0%	34.7%
Fire Protection	0	5,660	12,513	12,513	12,513	0.0%	35.8%	38.5%	33.4%	32.9%
Library	0	1,714	1,714	2,940	2,940	0.0%	10.8%	5.3%	7.8%	7.7%
Public Works	242	1,044	1,483	1,675	1,675	35.4%	6.6%	4.6%	4.5%	4.4%
Animal Care & Control	12	180	412	523	541	1.7%	1.1%	1.3%	1.4%	1.4%
Parks	49	958	2,487	2,487	2,487	7.2%	6.1%	7.6%	6.6%	6.5%
Recreation	11	173	395	502	520	1.7%	1.1%	1.2%	1.3%	1.4%
Planning	16	237	541	686	711	2.3%	1.5%	1.7%	1.8%	1.9%
General Admin	62	1,437	2,958	3,407	3,459	9.1%	9.1%	9.1%	9.1%	9.1%
SURPLUS/(DEFICIT)	\$730	\$10,691	\$33,908	\$41,054	\$42,347	52%	40%	51%	52%	53%

Note:

- Surplus/(Deficit) percent is a percentage of Total Revenues for respective Communities.
- All Dollar Amounts are in Uninflated 2006 Dollars.



Over time, the amount of the surplus as a percent of the total revenues can be expected to decline somewhat. This would be caused by the tendency for 1) municipal service costs to rise at a rate in excess of general inflation, and 2) the total assessed value of properties to lag behind actual market values. However, because of the size of the projected surplus at full build-out, it is unlikely that it could be significantly eroded by this effect.

Ventura County Impacts

There should also be a modest permanent beneficial fiscal impact on Ventura County from the full build out of the project. This modest impact is associated primarily with the completion of the Portrero community which extends virtually to the Ventura County line and which is actually more accessible to the currently limited urban areas of eastern Ventura County than to most of the urbanized portions of Los Angeles County.

Due to this circumstance and to the general proximity of much of the development to residents of eastern Ventura County, there should some positive economic impact on Ventura from the creation of additional jobs, primarily in the service industries, that are readily accessible to Ventura County residents.

Furthermore, to the extent that there currently exists some retail in eastern Ventura County and more is likely to develop over the term of this analysis, the proximity of the Portrero community residents should provide some additional support for Ventura County retailing.

Economic Impact

During the construction period of the Project (extending over 16 years) there will be significant one-time economic impacts on both Los Angeles and Ventura counties. Those impacts were estimated in terms of dollar output, payroll, jobs and taxes (state and local). The cumulative total impact of the Project on Los Angeles and Ventura counties over the term of the build-out is shown in Figure 3. A further breakdown of these impacts is presented in Exhibit 4.

These figures combine direct, indirect and induced impacts. The direct impact is that associated with the development of the Project itself. The indirect and induced impacts result from the direct impact of the Project being multiplied as businesses and households re-spend and spur activity in other sectors of the economy.

There will also be ongoing economic impacts. Notably, there may be a significant positive economic impact in the portion of northeastern Ventura County nearest to the Project. This impact would be expected both because of the proximity of the western portions of the Project to the Ventura County line and the convenience that businesses in that portion of Ventura County could offer to residents of the Project.

Figure 3
Combined Direct, Indirect & Induced Economic Impacts from Construction of the Project

	Los Angeles County	Ventura County	Total
Direct Construction Impacts			
Output (Millions)	\$6,984	-	\$6,984
Payroll (Millions)	\$2,969	-	\$2,969
Jobs	55,205	-	55,205
Indirect Impacts			
Output (Millions)	\$2,549	\$174	\$2,723
Payroll (Millions)	\$1,031	\$78	\$1,108
Jobs	23,627	1,776	25,403
Local Taxes (Millions)	\$378	\$28	\$405
Induced Impacts			
Output (Millions)	\$3,081	\$245	\$3,326
Payroll (Millions)	\$1,086	\$86	\$1,172
Jobs	28,649	2,278	30,927
Total Impacts			
Output (Millions)	\$12,613	\$419	\$13,032
Payroll (Millions)	\$5,086	\$164	\$5,250
Jobs	107,481	4,054	111,534
Local Taxes (Millions)	\$378	\$28	\$405

Sources of Information

The information on which this analysis is based derives largely from three sources:

1. Project descriptive information has been provided by Newhall Land and reviewed for both internal consistency and consistency with various publicly filed environmental documents.
2. Conversion of project parameters into revenue and employment impacts is based on factors assembled by the consulting team reflecting, for the most part, standard or widely accepted factors with well defined and clearly noted sources.
3. Expenditure data has in all cases come from Los Angeles County and, except for two expenditure areas, reflect responses by County officials to inquiries based specifically on a description of the Project. For Public Works, Recreation and Parks, project specific estimates could not be obtained and instead the consultants have extrapolated the relevant costs from recent County budget data on departmental expenditures in comparable geographic areas.

Finally, it should be noted that the consultant team has, when exercising judgment within a range of estimates, consistently chosen to utilize conservative assumptions, that is to say those which would understate revenues and overstate expenses.

Exhibit 4

**One-Time Economic Impacts During Development (2009-2025)
Allocation to Counties /1**

	Shares of Total Impacts				Total Impacts				Direct			Indirect				Induced		
	Output	Payroll	Jobs	Tax	Output (Million)	Payroll (Million)	Jobs	Tax (Million)	Output (Million)	Payroll (Million)	Jobs	Output (Million)	Payroll (Million)	Jobs	Tax (Million)	Output (Million)	Payroll (Million)	Jobs
Single Family																		
Los Angeles	96.9%	96.6%	96.1%	93.4%	\$6,128	\$2,193	\$47,094	\$190	\$3,419	\$1,176	\$21,870	\$1,378	\$547	\$12,853	\$190	\$1,330	\$469	\$12,371
Ventura	3.1%	3.4%	3.9%	6.6%	197	77	1,923	14	0	0	0	91	40	940	14	106	37	984
Total	100.0%	100.0%	100.0%	100.0%	6,325	2,270	49,017	204	3,419	1,176	21,870	1,469	587	13,793	204	1,436	506	13,354
Multi Family																		
Los Angeles	96.8%	97.0%	96.5%	92.9%	\$3,243	\$1,350	\$28,280	\$90	\$1,840	\$821	\$15,125	\$585	\$241	\$5,551	\$90	\$818	\$288	\$7,604
Ventura	3.2%	3.0%	3.5%	7.1%	107	42	1,035	7	0	0	0	42	19	430	7	65	23	605
Total	100.0%	100.0%	100.0%	100.0%	3,350	1,392	29,315	97	1,840	821	15,125	627	260	5,982	97	883	311	8,208
Commercial																		
Los Angeles	96.6%	97.2%	96.7%	93.0%	\$3,265	\$1,554	\$32,323	\$98	\$1,737	\$979	\$18,332	\$589	\$244	\$5,258	\$98	\$939	\$331	\$8,733
Ventura	3.4%	2.8%	3.3%	7.0%	116	45	1,103	7	0	0	0	41	19	408	7	75	26	694
Total	100.0%	100.0%	100.0%	100.0%	3,381	1,599	33,426	105	1,737	979	18,332	631	263	5,666	105	1,014	357	9,428
All Uses																		
Los Angeles	96.8%	96.9%	96.4%	93.2%	\$12,635	\$5,096	\$107,697	\$378	\$6,995	\$2,976	\$55,327	\$2,553	\$1,032	\$23,662	\$378	\$3,087	\$1,088	\$28,708
Ventura	3.2%	3.1%	3.6%	6.8%	420	164	4,061	28	0	0	0	174	78	1,779	28	245	86	2,282
Total	100.0%	100.0%	100.0%	100.0%	13,055	5,260	111,758	406	6,995	2,976	55,327	2,727	1,110	25,441	406	3,332	1,174	30,990

Ventura County (2006 \$'s)

Total output (GDP) - all industries \$44,574,824,000
Total wages (Per IMPLAN) 14,920,789,000

Project as Percent of Ventura County Total /2

Total Output 0.94%
Total Payroll 1.10%

Notes:

/1 Sources: Applied Economics; IMPLAN; and CBRE Consulting

/2 Project 16-Year total compared to current one-year Ventura County total.

II. INTRODUCTION

PURPOSE OF THE STUDY

The primary purpose of the Study is to estimate the revenues that the County would receive, and expenditures for which it would be responsible, by virtue of the Project being developed in an unincorporated, as opposed an incorporated area of the County. Both the County and Newhall Land have an interest in the extent to which the new revenues that would be generated by the Project can be expected to cover the cost to the responsible jurisdiction of providing required "municipal" services for the Project. The extent to which the Project is likely to generate a net fiscal burden or a net fiscal surplus is of importance to the County in determining how it would plan to provide the necessary support services for the development.

A secondary purpose of the Study is to estimate the one-time economic impact on both Los Angeles and Ventura counties that would result from the construction of the Project over its build-out period. These are measured in terms of dollar output, payroll, number of jobs, and indirect tax revenues. Those impacts consist of direct, indirect and induced components. In the case of this Project, the direct impacts result from construction of the Project itself. The indirect impacts are new economic activity resulting from new business-to-business activity required to support the direct impact. The induced impact is a result of new spending by households as a result of their increased household income.

SOURCES OF INFORMATION

Information for this Study was obtained from a variety of sources. Newhall Land was the primary source of information on the physical and economic characteristics of the Project such as types and numbers of units, market values and timing of the build-out and were reviewed for reasonableness by the Consultants. The Office of Unincorporated Area Services of the Los Angeles County Chief Administrative Office was a primary contact on general budget matters. Other County departments were contacted for revenue and cost information for specific areas of concern. The Environmental Impact Report ("EIR") for the Project that has been certified by the County was also a source of some data. Data from the Consumer Expenditure Survey published by the U.S. Bureau of Labor Statistics were also used in projecting spending by new residents. Surveys of the surrounding areas were conducted to arrive at estimates of activities such as future shopping patterns. All financial figures are in terms of 2006 dollars.

LIMITATIONS

This Study is based on the Project assumptions presented. To the extent the actual Project differs in a material way from those assumptions, the fiscal impact may also differ materially. The results are also contingent on the basic parameters of the various revenues and expenditures on the part of the county remaining relatively constant over the term of build-out. This report is subject to the appended Assumptions and General Limiting Conditions.

ORGANIZATION OF THE REPORT

The report is organized into eight sections. Those sections are as follows.

- I. Executive Summary
- II. Introduction
- III. Project Description and Specifications
- IV. Analytic Approach
- V. Revenues
- VI. Expenditures
- VII. Net Impact
- VIII. One-Time Economic Impact

Tabulations of certain assumption derivations and projections of detailed findings are included in the Appendix.

AUTHORSHIP AND ACKNOWLEDGEMENTS

The study was conducted and this report was produced as a joint effort of Allan D. Kotin & Associates and CBRE Consulting ("ADK&A/CBRE"). Ross S. Selvidge, Ph.D. of CBRE Consulting was the principal author of this Study. Allan D. Kotin of Allan D. Kotin & Associates and Thomas R. Jirovsky of CBRE Consulting exercised administrative control. Martin Zimmerman of the Office of Unincorporated Area Services of the Los Angeles County Chief Administrative Office was of particular assistance in obtaining information on which this Study was based. Genji Nakata, Manager of Finance of Newhall Land provided extensive assistance in the form of providing information on the Project and development plans.

III. PROJECT DESCRIPTION AND SPECIFICATIONS

PHYSICAL DESCRIPTION

The Project will be located on 3,294 acres of largely undeveloped land in an unincorporated area of Los Angeles County. The land lies to the west of Interstate 5 ("I-5") on the western edge of the Santa Clarita Valley. State Highway 123 runs from I-5 west through the Project and into Ventura County. The City of Santa Clarita lies just to the east of I-5. The residential communities of Stevenson Ranch and Westridge are in unincorporated areas of the County adjacent to the southeast edge of the Project.

The Project will consist of seven different communities: Entrada, Potrero, Legacy, Homestead, Mission Village, Landmark, and Valencia Commerce Center. Each community will consist of a different mix of residential and non-residential products. These communities are referred to collectively as the Westside Communities.

At full build-out there will be a total of 27,893 residential units. There will be 24,242 owner occupied and 3,651 rental units. Approximately 10.9 million square feet of non-residential improvements are planned. That will consist of 3.1 million square feet of retail space, 4.7 million square feet of office space, 2.9 million square feet of R&D space and a 300-room hotel of approximately 165,000 square feet. Exhibit 5 presents a tabulation of the total number of acres of development, residential units and square feet of non-residential improvements for the entire Project and for each community separately. Exhibit 6 presents a tabulation of the amount of residential development in place in the first year and at four-year intervals thereafter. This proposed development is distinct from existing development on the west side of I-5 such as existing portions of Stevenson Ranch and Westridge.

TIMING OF DEVELOPMENT

A schedule of when the absorption begins and how long it lasts for each project component is presented in Exhibit 5. The first homes will be completed in 2009. The last homes will be completed in 2024. The Project is estimated to be approximately 50% built-out by 2015, and approximately 75% built-out by 2018. From that point, the amount of development slowly tapers off through the completion in 2024. Other than to note that the sales rates implied in the absorption forecasts seem generally reasonable, the consultants express no opinion as to the validity of the implied time periods for planning, land development, and construction.

POPULATION AND ASSESSED VALUE

Based on the average number of residents per each unit type specified in the EIR, the Project will contain 74,256 residents at full build-out. Of those, a total of 66,318 and 7,939 residents will live in the owner-occupied and rental portions of the Project, respectively. At full build-out, the Project will also contain 32,399 employees. The figures at full build-out for the entire Project and each community are presented in Exhibit 5. These are critical inputs for the derivation of fiscal impacts shown later in the report. The number of residents and employees in the first year and at four-year intervals thereafter are presented for the entire Project and each community in Exhibit 6.

Newhall Land provided an estimated sales price (in constant 2006 dollars) for each separate home or product type in the Project or the necessary information to derive those values. Based on the unit values, the total assessed value of the Project was computed. The total assessed value of the owner-occupied residential units was computed at approximately \$13.4 billion and the assessed value for rental residential units were estimated at approximately \$867 million. The combined assessed value of the non-residential products was estimated at approximately \$3.6 billion. These total figures for the entire project as well as the individual communities are presented in Exhibit 5. The assessed values for the project components by community in the first year and at four-year intervals thereafter are presented in Exhibit 6.

PROJECT SPECIFIC FUNDING MECHANISMS

In developing new communities, Newhall Land has in the past and plans in the future to establish a number of special districts or other mechanisms by which the annual cost of maintaining certain public and private facilities will be funded. These may include community facilities districts ("CFD"), assessment districts ("AD"), and homeowner associations ("HOA"). In the case of CFDs or ADs, the facilities maintained would have to be publicly owned. An HOA can maintain privately owned facilities. These mechanisms can pay for the annual maintenance and operation of facilities such as streets, rights of way, open space and recreational facilities. To the extent these mechanisms are created and implemented, the County will be relieved of having to fund these costs from its General Fund revenues as is required in many other unincorporated areas.

HOAs rely on regular periodic assessments on properties for their funding. Maintenance of private roadways, recreation facilities and open space are examples of activities that are typically funded by HOAs. To the extent these are effectively substitutes for public facilities, the County is relieved of what could otherwise be its responsibility for maintenance funding.

CFDs and ADs receive their funding from levies that appear on annual property tax bills. They are in addition to the 1.00% general levy and other levies that have been approved by voters. As with HOA maintained facilities, maintaining publicly owned facilities by means of CFDs and ADs relieves the County of what could otherwise be a burden for its general fund.

The consulting team has relied on information from Newhall Land as to which facilities' annual maintenance costs will be financed by CFDs, ADs, and HOAs. These facilities are identified in the discussion of expenditures on section VI. The principal facilities which it was assumed the County would maintain at its own expense were the quantities of roadways and park land that were identified by Newhall Land. The extent to which one or another of these alternative funding mechanisms will be utilized will vary from community to community and will depend on the specific design and facilities in each.

Exhibit 5: Summary of Expenditures and Revenues' Inputs, By Community and Land Use

Community Land Use	Acres	Units	GLA SF	Absorption		Total Population	Total Employees	Assessed Value By Year 2031 ^{/1} (Million \$'s) ^{/5}	Retail Expenditure ^{/2} in Uninc. LA County (Million \$'s) ^{/5}	Sales in Project's New Retail Space (Million \$'s) ^{/5}
				Term (Years)	Start Date					
TOTAL PROJECT^{/3}	3294.0	27,893	10,867,716	16.0	6/1/2009	74,256	32,399	17,805.65	264.92	517.63
Residential for Sale	2,538.0	24,242		16.00	6/1/2009	66,318		13,380.05	219.98	
Apartment Use	139.0	3,651		10.00	1/1/2010	7,939		867.04	23.67	
Commercial - Retail	185.4		3,079,389	8.00	1/1/2010		7,663	1,370.17	5.03	
Commercial - Office	242.4		4,673,597	14.00	1/1/2010		18,694	1,645.83	12.27	
Commercial - Other	6.7		170,024	1.00	1/1/2016		152	40.13	0.10	
Industrial R&D	182.3		2,944,706	6.00	7/1/2010		5,889	502.44	3.87	
ENTRADA^{/4}	355.3	3,535	3,002,013	12.00	9/1/2012	8,744	8,899	2,646	35.00	260.00
Residential for Sale	171.9	2,827		10.00	9/1/2012	7,059		1,337.98	24.50	
Apartment Use	23.0	708		7.00	12/1/2014	1,685		162.13	4.66	
Commercial - Retail	88.5		1,543,625	4.00	4/1/2014		3,823	703.42	2.51	
Commercial - Office	55.5		1,173,150	8.00	1/1/2016		4,693	390.49	3.08	
Commercial - Other	6.7		170,024	1.00	1/1/2016		152	40.13	0.10	
Industrial R&D	9.7		115,214	1.00	1/1/2016		230	12.31	0.15	
HOMESTEAD^{/4}	986.7	5,675	1,250,000	10.00	5/30/2010	14,777	2,779	3,547	54.55	4.95
Residential for Sale	902.7	5,488		10.00	5/30/2010	14,332		3,347.76	51.50	
Apartment Use	7.4	187		1.00	2/28/2014	445		45.46	1.23	
Commercial - Retail	3.3		27,500	1.00	5/31/2014		69	11.81	0.05	
Commercial - Office	11.7		132,500	1.00	5/31/2014		530	38.81	0.35	
Industrial R&D	61.7		1,090,000	1.00	5/31/2014		2,180	103.53	1.43	
POTRERO^{/4}	895.0	8,428	1,257,000	11.00	11/30/2014	23,322	4,085	5,014	78.35	106.85
Residential for Sale	810.0	7,908		11.00	11/30/2014	23,104		4,366.08	72.25	
Apartment Use	20.0	520		3.00	11/30/2017	218		125.33	3.42	
Commercial - Retail	32.5		628,500	2.00	2/28/2016		1,571	230.10	1.03	
Commercial - Office	32.5		628,500	2.00	2/28/2016		2,514	292.84	1.65	
MISSION VILLAGE^{/4}	413.8	5,331	1,299,000	10.00	8/30/2009	12,993	4,724	3,003	47.39	50.38
Residential for Sale	317.4	4,285		8.00	8/30/2009	10,378		2,274.69	38.09	
Apartment Use	27.6	1,046		3.00	4/30/2010	2,615		235.16	6.20	
Commercial - Retail	17.8		314,850	3.00	5/31/2012		787	143.08	0.52	
Commercial - Office	51.0		984,150	5.00	5/31/2014		3,937	349.74	2.58	
LEGACY^{/4}	293.5	3,480	486,000	7.00	6/1/2012	10,144	1,689	1,842	30.82	27.20
Residential for Sale	225.4	2,741		7.00	6/1/2012	8,296		1,470.78	24.53	
Apartment Use	40.1	739		6.00	9/1/2013	1,848		188.00	5.18	
Commercial - Retail	15.0		170,000	1.00	10/1/2014		425	80.29	0.28	
Commercial - Office	13.0		316,000	2.00	10/1/2014		1,264	103.00	0.83	
LANDMARK^{/4}	174.7	1,444	373,701	7.00	6/1/2009	4,275	1,354	815	12.97	14.13
Residential for Sale	110.6	993		3.00	6/1/2009	3,148		582.77	9.11	
Apartment Use	21.0	451		1.00	1/1/2010	1,128		110.96	2.97	
Commercial - Retail	8.7		94,199	1.00	1/1/2010		235	35.45	0.15	
Commercial - Office	34.5		279,502	6.00	1/1/2010		1,118	85.46	0.73	
VALENCIA COM. CTR.^{/4}	175.0	0	3,200,002	2.00	7/1/2010	0	8,870	938	5.82	54.13
Commercial - Retail	19.7		300,715	2.00	1/1/2011		752	166.02	0.49	
Commercial - Office	44.4		1,159,795	5.00	7/1/2010		4,639	385.48	3.05	
Industrial R&D	110.9		1,739,492	5.00	7/1/2010		3,479	386.60	2.28	

/1 Includes a 5% additional assessed value for 'Unsecured' commercial property.

/2 The portion of Project Area residents & employees' retail expenditure (excluding Auto Sales), which is spent in Unincorporated area outside the Project Area.

/3 Refer Exhibit 5.0 for Consolidated Product Level Annual break-up of Costs & Revenues Drivers.

/4 Refer Exhibits 5.1 thru 5.6 for Consolidated Product Level Annual break-up, and Exhibits 6.1 thru 6.6 for Individual Product Level Annual schedule for Costs & Revenues Drivers

/5 All Dollar Amounts are in Uninflated 2006 Dollars.

Exhibit 6:

Summary of Revenue & Expenditure Inputs at 4-year intervals

Use - Product	2009	2013	2017	2021	2025
ABSORPTION					
RESIDENTIAL UNITS	528	9,478	21,036	26,908	27,893
Residential for Sale	528	7,951	18,223	23,257	24,242
Apartment Uses	0	1,527	2,813	3,651	3,651
NON-RESIDENTIAL SF	0	3,316,300	10,253,316	10,743,479	10,853,479
Commercial - Retail	0.0	642,814	3,065,152	3,065,152	3,065,152
Commercial - Office	0.0	1,125,994	4,073,434	4,563,597	4,673,597
Commercial - Other	0.0	0	170,024	170,024	170,024
Industrial R&D	0.0	1,547,492	2,944,706	2,944,706	2,944,706
POPULATION					
RESIDENT	1,636	24,745	56,459	71,682	74,256
Residential for Sale	1,636	20,928	49,552	63,744	66,318
Apartment Uses	0	3,818	6,907	7,939	7,939
EMPLOYEES	0	9,206	29,998	31,959	32,399
Commercial - Retail	0.0	1,607	7,663	7,663	7,663
Commercial - Office	0.0	4,504	16,294	18,254	18,694
Commercial - Other	0.0	0	152	152	152
Industrial R&D	0.0	3,095	5,889	5,889	5,889
ASSESSED VALUE (in Million \$'s)	\$300	\$5,876	\$14,138	\$17,297	\$17,806
Residential for Sale	\$300.5	\$4,488.6	\$10,102.1	\$12,903.6	\$13,380.1
Apartment Uses	0.0	353.4	671.1	867.0	867.0
Commercial - Retail	0.0	317.0	1,370.2	1,370.2	1,370.2
Commercial - Office	0.0	372.1	1,452.5	1,613.6	1,645.8
Commercial - Other	0.0	0.0	40.1	40.1	40.1
Industrial R&D	0.0	344.7	502.4	502.4	502.4
RETAIL EXPENDITURE (in Million \$'s)	\$5	\$87	\$203	\$256	\$265
Residential for Sale	\$4.8	\$71.8	\$164.9	\$211.1	\$220.0
Apartment Uses	0.0	9.4	18.1	23.7	23.7
Commercial - Retail	0.0	1.1	5.0	5.0	5.0
Commercial - Office	0.0	3.0	10.7	12.0	12.3
Commercial - Other	0.0	0.0	0.1	0.1	0.1
Industrial R&D	0.0	2.0	3.9	3.9	3.9

Note: All Dollar Amounts are in Uninflated 2006 Dollars

IV. ANALYTIC APPROACH

UNINCORPORATED IMPACT APPROACH

In undertaking this analysis, as expressed both in the consulting team proposal and the formal work statement and contract developed by Newhall Land, the consulting team explicitly contemplated a focus on those fiscal impacts associated with the presence of the new developments in the unincorporated portions of Los Angeles County. The County of Los Angeles provides a meaningful group of services, i.e. health care, social welfare, the court system etc., to the entire population both in cities and in unincorporated areas. It is not the intention of this study to examine these services. Similarly, there is some amount of Project-generated revenues, primarily but not exclusively associated with property tax that accrue to the County by virtue of its role as a County.

There is a separate set of revenues that accrue to the County by virtue of the fact that the projects exist in unincorporated areas. This report focuses on the revenues uniquely associated with unincorporated status rather than the total revenues.

This approach represents a difference from an earlier fiscal impact study prepared by The Levander Company for Newhall Land in 1996 for the predecessor project. In that study, Levander considered all County revenue and all County expenses.

This methodology used has been adapted directly from the current methodology used by the Unincorporated Services and Special Projects Division of the Los Angeles County Chief Administrative Office, in examining and negotiating the fiscal implications of annexations and incorporations.

Briefly stated, it consists of identifying a group of six services that collectively comprise the core services that change status when an area is incorporated or annexed. The costs of these services are, in most cases, transferred from the County to the City. With respect to revenues, there are a whole group of revenues that automatically transfer by virtue of the fact that they are based on the incorporation status of a project. The revenue in question that is not automatically reclassified is property tax.

The basic method used by the Unincorporated Services Group and by Los Angeles County in annexations is to establish the ratio of property tax to the general fund (the Tax Ratio), and then to reallocate to the City that amount of property tax which equals the Tax Ratio, as defined above, applied to the total of the service costs that are transferred to the City.

For example, if the property tax represents 55% of the General Fund and the combined six services represent an annual cost of \$10 million, then 55% of that cost or \$5.5 million in property taxes would be shifted, usually after some period of transition, from the County to the City.

The rationale for this narrower approach lies in the assumption that the market forces that cause housing to be built at this location exist largely independent of whether or not the area remains unincorporated. If, for some reason, the County refused to process applications for development, there is a strong likelihood that the property owners would seek either to annex to an existing incorporated city or to incorporate a new jurisdiction. This pattern has characterized several other areas in Southern California and seems likely to occur at this location, absent the imposition of urban growth boundaries or some rule comparable to the SOAR initiative in Ventura County. Whether or not development processing in such alternative jurisdictions would cause changes in the pattern of development or result in more or less exactions is outside the scope of this study. But historical evidence and the collective

experience of the consulting team confirm the core assumption that all or most of the development would occur anyway.

PRICE LEVEL ASSUMPTION

The analysis was conducted on a constant dollar basis. All figures in the Study are presented in terms of uninflated 2006 dollars. This eliminates the effects of price level changes that can lead to misinterpretation of results, particularly over the long term. As noted in the introduction and elsewhere in the analysis, this assumption may mask some deterioration in the surplus over time due to the lag between inflation in housing costs and a corresponding increase in property taxes.

REVENUES

The revenues that were included in the analysis are primarily taxes from major categories that will be received by the County as a consequence of the Project being located in an unincorporated area of the County. There are five separate property-specific taxes as well as sales tax, utility user tax, documentary transfer tax, and transient occupancy tax. Franchise fees are also included in the analysis. There are a number of other smaller revenues that will produce some revenues for the County. However, they are relatively small and due to unavailability of data, the portions attributable to the Project's unincorporated status cannot be calculated or estimated with any degree of reliability.

Most of the real estate based taxes are linked to the assessed value of the properties being taxed. The sales tax revenues are estimated based on both the typical sales of the type of retail development proposed and the propensity of the new residents to make taxable purchases outside of the Project, but still in an unincorporated area of the County. Utility user taxes were estimated based on anticipated utility usage. The transient occupancy tax was based on the projected gross room revenues of the hotel component. The documentary transfer tax revenue was estimated based on assumed turnover (i.e., resale) rates for the residential and non-residential components, in addition to the initial development of those properties. The estimates of franchise fees and gasoline tax subventions were based on per capita factors derived from the County's Fiscal Year 2005-2006 budget.

EXPENDITURES

There are eight principal categories of expenditures that the County would have to fund because the Project is in an unincorporated area of the County that it would not or might not be required to fund if the development was in an incorporated area. Those categories are:

1. Law enforcement (Sheriff),
2. Fire protection,
3. Library,
4. Public works,
5. Animal care and control,
6. Parks and recreation,
7. Planning and
8. General administrative support.

There is a wide range of services that the County provides irrespective of whether an area is unincorporated or incorporated. Those services were not included in the analysis

The Sheriff expenditures were estimated by the Sheriff's Department on the basis of an unincorporated area level of service average cost.

The fire protection costs were based on station estimates from the County Fire Department.

Annual Library expenditures and timing of the construction of the library facilities were based on information provided by the County Library. Public works expenditures were estimated based on unit costs provided by the County

Public Works department and physical specifications provided by Newhall Land. Parks maintenance expenditures were estimated based on the unit cost factors from the 1996 Levander fiscal analysis and physical specifications from Newhall Land, inflated to 2006 levels.

Animal care and control, recreation, and planning expenditures were estimated based on per capita factors derived from the County Fiscal Year 2005-2006 budget. For purposes of this calculation of per capita estimates, only the population of the unincorporated area of the County was utilized.

There exists no statutory definition of fiscal impact and it is manifest that fiscal impact will be measured differently as a function of the choice of jurisdiction and the scope of analysis. In this analysis of expenditures the following conventions are used for the reasons given:

- Only operating expenditures are considered since the funding of infrastructure is itself the subject of at least two other processes outside the scope of his analysis: (1) conditions of planning or subdivision approval; and (2) imposition of impact fees.
- Only those expenditures associated with unincorporated status of the project are considered specifically excluding countywide operating costs which would apply if the same improvements were constructed in an incorporated area. The rationale for this is that market forces would likely create the same improvements independent of their "unincorporated" status
- No consideration is given to cost or revenue impacts on jurisdictions other than Los Angeles County although it is manifest that such impacts exist. This convention reflects the critical and dominant nexus between fiscal impact measurement and the development approval process which tends to inevitably focus such impact measurement on the jurisdiction granting development approval.

V. REVENUES

PROPERTY TAXES

General Levy

The general levy property tax in California is set at 1.00% of assessed value. The assessed value of a property in California is set at its full market value each time it is sold or transferred. Between transactions, the assessed value of a property cannot be increased by more than 2.00% per year. Because this analysis is in terms of uninflated 2006 dollars, no change in the assessed values was assumed.

Different taxing entities receive different shares of the 1.00% general levy based on what is called the tax rate area ("TRA") in which a property is located. The vast majority of the land in the Project is in ten different TRAs. In each of those different TRAs, the taxing entities receive a different share of the 1.00% general levy. In addition, the County receives several shares of the 1.00% general levy for different designated purposes. The County share for its General Fund in those TRAs ranges from approximately 20% to 30% of the general levy. For the County Library the shares range from between 2% to 3% of the general levy. For the County Fire Department the share ranges from approximately 17% to 18% of the general levy.

As has already been indicated, if the Project area were to incorporate, the County would lose a part of the share of the general levy allocated to the County's General Fund. At the same time, The County would also shed the financial burden for providing certain "municipal" type services. The County's Chief Administrative Office estimates that the percent of their share of the general levy that is contingent on an area being unincorporated is not less than 55% and probably slightly higher. To avoid overstating the County's General Fund portion of their general levy property tax revenue that is dependent on the area being unincorporated, a 55% factor was used in the analysis.

To estimate the County's several allocations of the property taxes based on assessed value, the TRAs for each community were tabulated and the different allocations of shares of the general levy were averaged for each community. The County's General Fund shares for each community were also multiplied by the 55% factor to obtain the amount of that component of the property tax attributable to its unincorporated status. The County only receives the other two shares of the general levy (for fire protection and the Library) if the County also provides and funds those services. Exhibit 7 presents a derivation of the shares of the general levy for each of those shares for each of the communities.

After adjustment, the County's General Fund share of the general levy that is dependent on the area being unincorporated ranges from approximately 12% to 16% depending on the community involved. The County's general levy share for the Library varies slightly just above 2% in the six communities. The County's General Fund share of the general levy ranges from just below 18% to just over 19%, depending on the community. The combined shares of the general levy for the different communities are in the low to mid 30% range.

Exhibit 7

Assumptions for County Revenues

PROPERTY TAXES								
Property Tax Rate		1.00%						
GENERAL LEVY (Potion of 1%)		Entrada	Homestead	Potrero	Mission Vil	Legacy	Landmark	VCC
001.05	Los Angeles County General	0.2810	0.2297	0.2204	0.2383	0.2384	0.3003	0.2547
001.20	L.A. County Accum. Cap Outlay	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Combined	0.2812	0.2298	0.2205	0.2384	0.2386	0.3004	0.2548
	Adjustment factor	55%	55%	55%	55%	55%	55%	55%
	Adj. General Levy	0.1546	0.1264	0.1213	0.1311	0.1312	0.1652	0.1401
003.01	L A County Library	0.0245	0.0276	0.0276	0.0268	0.0296	0.0226	0.0262
005.25	Road District #5	0.0065	0.0072	0.0072	0.0070	0.0077	0.0061	0.0069
007.30	Consol. Fire Pro. Dist. of L.A.County	0.1755	0.1849	0.1858	0.1832	0.1977	0.1703	0.1816
007.31	L A County Fire-FFW	0.0065	0.0053	0.0051	0.0055	0.0055	0.0069	0.0058
	Combined	0.1820	0.1902	0.1909	0.1886	0.2032	0.1772	0.1875
SPECIAL TAXES								
		SFD	Attached	Apartment	Comm	High Rise		
Library								
	Per Unit	\$25.72	\$25.72	\$25.72				
Fire Department								
	Per Unit	\$49.93	\$49.93					
	Multit Unit or Commercial							
	Base Amount			\$63.07	\$60.43	\$73.58		
	Average							
	Units Per Parcel			100				
	Sq Ft Per Unit			1,100				
	Sq Ft Per Parcel			110,000	200,000	200,000		
	Sq Ft Component							
	Overage							
	Exempt SF			1,555	1,555	1,555		
	Taxed SF			108,445	198,445	198,445		
	Tax Rate PSF			0.0064	0.0407	0.0496		
	Tax Amount			\$694.05	\$8,076.71	\$9,842.87		
	Total			\$757.00	\$8,137.00	\$9,916.00		
	Average Tax per Unit or SF			\$7.57	\$0.04	\$0.05		
DOCUMENTARY TRANSFER TAX								
		County Share			As % of Transfer Value			
Tax Dollars		\$1.10	0.11%	50.00%	0.055%			
Per Transfer Value		\$1,000						
UTILITY USER TAXES								
Water, Electricity & Gas Bill		Residential	Retail	Office				
	Per Unit	\$1,560.00						
	Per SF		\$2.80	\$2.00				
	Tax Rate	5%						
Telephone Bill								
	Per Unit	\$600						
	Per Employee		\$420	\$780				
	Tax Rate	5%						
		Weighted Average Usage for Commercial Area by Community						
		Entrada	Homestead	Potrero	Mission Vig.	Legacy	Landmark	
Electricity & Gas								
	Per SF	\$2.41	\$2.02	\$2.40	\$2.19	\$2.28	\$2.20	
Telephone								
	Per Employee	\$595	\$772	\$600	\$693	\$654	\$689	

Note: All Dollar Amounts are in Uninflated 2006 Dollars

Exhibit 7 (Continued)

Assumptions for County Revenues

TRANSIENT OCCUPANCY TAX							
Number of Rooms	300						
Hotel Sales' Tax							
Taxable Sales							
% of Room Revenue	30%						
Amount	3,079,800						
Tax							
Rate	1.00%						
Amount	30,800						
Gross Room Revenue							
ADR	\$125						
Occupancy	75%						
Days	365						
Amount	\$10,266,000						
Transient Occupancy Tax							
Rate	12.00%						
Amount	\$1,231,920						
RETAIL SALES TAX							
General Sales Tax							
Tax Rate	1.00%						
Retail Space (SF)							
A	28,475	27,500	628,500	97,650	170,000	6,534	0
B	194,150	0	0	73,500	0	7,079	91,429
C	750,000	0	0	16,000	0	80,586	209,286
D	571,000	0	0	121,500	0	0	0
E	0	0	0	6,200	0	0	0
Total	1,543,625	27,500	628,500	314,850	170,000	94,199	300,715
Groceries							
Sq Ft Each	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Number	2	0	2	2	1	1	0
Total Sq Ft	120,000	0	120,000	120,000	60,000	60,000	0
Percent of Total	7.8%	0.0%	19.1%	38.1%	35.3%	63.7%	0.0%
Taxable Sales							
Non-Grocery							
Percent of Sq Ft	92.2%	100.0%	80.9%	61.9%	64.7%	36.3%	100.0%
Sales PSF							
Un-Adjusted	\$250	\$250	\$250	\$250	\$250	\$250	\$250
Non-Tax & Vacancy	30%	30%	30%	30%	30%	30%	30%
Adjusted	175	175	175	175	175	175	175
Grocery							
Sales PSF							
Total	450	450	450	450	450	450	450
Taxable							
Percent	30%	30%	30%	30%	30%	30%	30%
Amount	140	140	140	140	140	140	140
Combined Weighted PSF							
Non-Grocery	161	175	142	108	113	64	175
Grocery	11	0	27	53	49	89	0
Average used for Sales est.	170	180	170	160	160	150	180
	262,416,250	4,950,000	106,845,000	50,376,000	27,200,000	14,129,850	54,128,700
FRANCHISEE FEES							
Per Capita	\$7.00						

Note: All Dollar Amounts are in Uninflated 2006 Dollars

The assessed values for each of the separate owner-occupied residential unit types were based on target sales prices in 2006 dollars that were provided by Newhall Land. The assessed values for each of the separate income producing product types (rental residential and commercial) were derived based on projected rental income, as well as estimates of expense ratios and market capitalization rates. The total Project assessed value is estimated at approximately \$300 million in the first year. Upon completion the assessed value is estimated at a total of approximately \$17.8 billion. The residential component is valued at approximately \$14.2 billion and the non-residential component is valued at approximately \$3.6 billion.

In each community, each year's cumulative assessed value is multiplied by the appropriate percent share of the general levy to produce the annual property tax revenues for the different allocations (General Fund, fire protection and Library). As indicated in Figure 4a, the general levy revenues begin at approximately \$1.1 million in the first year and rise to approximately \$62.2 million at full build-out in 2025. The largest component of those funds are the share of the general levy dedicated to fire protection, followed closely by the General Fund component and then the Library component.

Figure 4a

	2009	2013	2017	2021	2025
Property Taxes – General Levy (000)	\$1,091	\$20,620	\$49,645	\$60,473	\$62,207

Special Taxes

There are two special taxes that are levied in addition to the general levy and which the County would not receive if it were not required to provide certain services. One special tax is an augmentation to the County Library funding. That tax is levied at an annual rate of \$25.72 per residential unit (owner-occupied or rental). During the build-out of the Project, this annual revenue is estimated to start at \$14,000 and rise to approximately \$717,000 in 2025.

The other special tax is dedicated to funding fire protection. It is levied on the basis of a formula that applies different rates to the square feet of improvements of different types of non-owner occupied residential and commercial properties. A flat rate per unit is applied to owner-occupied residential properties. During the build-out of the Project, this annual revenue is estimated to start at approximately \$26,000 and rise to approximately \$1.7 million in 2025, giving total special taxes starting at \$40,000 in 2009 and rising to approximately \$2.4 million in 2025 (Figure 4b). The derivation of the rates applied to the different product types in the Project is presented in Exhibit 7.

Figure 4b

	2009	2013	2017	2021	2025
Special Taxes (000)	\$40	\$788	\$1,893	\$2,322	\$2,401

DOCUMENTARY TRANSFER TAX

This tax is levied on the value transferred in most real estate transactions in California. The County receives a share of this value-based tax. The amount the County receives is 0.055% of the value of the real estate transferred. The County will receive these revenues when the various properties are first developed and sold to initial buyers, as well as when properties in the Project re-sell over time.

In each year the value of the new properties developed and sold to their initial purchasers is multiplied by the 0.055% rate to produce the documentary transfer tax from the initial sale. In addition, in each year, the value of all the previously developed properties is multiplied by a factor to estimate the value of the properties that, on average, can be expected to resell each year. That value of the resold properties is also multiplied by the 0.055% tax rate to produce the other component of the County's annual documentary transfer tax revenues. Residential real estate in California is widely believed on average, to sell at an interval of less than 10 years. Commercial real estate is believed to sell at a less frequent interval. To avoid overestimating the County's documentary transfer tax revenues, it was assumed that the owner-occupied residential properties sold on average of once every ten years. This would produce a 10% annual turnover for those properties. It was assumed that the other properties sold on average at a 20-year interval which would produce a 5% annual turnover for those properties.

In the first year, it is estimated that the County will receive approximately \$166,000 in revenue from the documentary transfer tax, all from the initial purchases of the newly developed properties. The annual revenue is estimated to rise to \$908,000 in 2025 at full build-out when the revenue would be generated by the resale transactions. Figure 4c presents these revenues at five points in time over the build-out.

Figure 4c

	2009	2013	2017	2021	2025
Documentary Transfer Taxes (000)	\$166	\$1,262	\$1,665	\$1,101	\$908

UTILITY USER TAX

The County levies a 5.00% tax on the consumption of electric power, water, natural gas, and telephone service for both residential and non-residential users. The Project contains residential units of varying size and different types of non-residential products. An average annual dollar usage for the different utilities per residential unit was estimated. Those estimates were based on industry standard assumptions and trade sources such as the Building Owners and Managers Association (BOMA) and International Conference of Shopping Centers (ICSC). Those estimates were then multiplied by the number of completed units to produce the total annual dollar amount of utility usage by residential properties in each year. This dollar usage was multiplied by the 5.00% tax rate to produce the total annual utility user tax revenue for the County. The usage by the non-residential properties was estimated on a usage per square foot basis for electric power, water and natural gas and on a per employee basis for telephone service. These factors are presented in Exhibit 7.

In the first year, it is estimated that the County will receive approximately \$57,000 in revenue from the utility user tax. The annual revenue is estimated to rise to \$5.3 million in 2025 at full build-out. Figure 4d presents these revenues at five points in time over the build-out.

Figure 4d

	2009	2013	2017	2021	2025
Utility User Taxes (000)	\$57	\$1,699	\$4,414	\$5,167	\$5,300

TRANSIENT OCCUPANCY TAX

The County levies a 12.00% transient occupancy tax ("TOT") on room revenues for hotels and motels located in unincorporated areas of the County. The Project contains a 300-room hotel that is scheduled to be completed in 2016. Based on estimates of average daily room rates ("ADR") and occupancy, an estimate of the annual gross room revenues was derived. This 12.00% was then applied to produce an estimate of the annual TOT revenue that the County would receive. Based on a relatively conservative estimate of the potential ADR, the annual TOT revenue is estimated to be in the range of \$1.2 million. This derivation is presented in Exhibit 7.

Figure 4e

	2009	2013	2017	2021	2025
Transient Occupancy Taxes (000)	\$0	\$0	\$1,232	\$1,232	\$1,232

In estimating the revenue from TOT generated by the new hotel facilities in the Project, the consultants have not considered any offset for possible transfer of patronage from existing hotels. However, at the same time, no effort has been made to estimate the additional patronage of existing hotels that will be created by visitors to the more than ten million square feet of new commercial space and over 27,000 new housing units developed as part of the Project. Consequently, the overall additional TOT revenues are likely to be understated, a result consistent with the general approach taken by the consultants. In this instance, any attempt to quantify induced hotel demand would require a host of essentially unverifiable assumptions about travel mix, access patterns, room rates and other items that would be highly speculative at this time.

SALES TAX

The County receives a 1.00% sales tax on all taxable purchases that take place at retailers located in the unincorporated areas of the County. The Project will produce new sales tax revenue for the County from two sources. The first source is the new taxable sales that will occur at the new retail space that is developed in the Project itself. The second source of new sales tax revenue will be from taxable purchases by the Project's residents and employees in nearby retailers in unincorporated areas of the County.

Shopping Patterns

The retail development that is planned in the Project is both local and regional serving. It can be expected to capture a large portion of the residents' spending on goods that are normally purchased close to home. The Project will also capture a portion of their other retail sales. Employees who work in the commercial portions of the Project can also be expected to spend a small but measurable amount on purchases near their workplace.

Based on the type of retailing that the Project will offer and a thorough survey of the shopping alternatives that are available outside of the Project, it was estimated that Project residents would make in the range of 32% of their non-automobile related retail purchases at new retailers in the Project. That same analysis also estimated that the residents of the Project would make approximately 15% of their non-automobile related retail purchases in nearby unincorporated areas of the County. Sales tax from both of those sources would be new sales tax revenue for the County.

Sales in Project Retail Components

Retail sales at the Project's retail components were estimated by dividing the components into categories to which industry standard sales productivity rates were then applied. Allowances were made for taxable and non-taxable sales and services as well as vacancies. The average annual taxable sales per square foot for each community were then multiplied by the number of retail square feet in operation in each community in each year. There will also be some sales tax associated with the hotel operation from "in house" taxable retail purchases by guests. The annual total taxable sales were multiplied by the 1.00% tax rate to derive the sales tax revenue to the County. The derivation of the sales per square foot figures is presented in Exhibit 7.

As previously noted, spending by the residents of the Project will account for a portion of the total retail sales in the Project. The remainder will be derived from spending by persons employed in the Project and other patrons who both live and work elsewhere. At full build-out and assuming the Project's retail achieves an industry standard level of sales productivity, the annual taxable sales are projected to reach \$517 million.

Unlike virtually all other revenue estimates in this report, this projection of sales tax was not based essentially on endogenous, i.e. internal, characteristics of this project. In this instance, the large amount of proposed retail space must rely on patronage from other growth in the north county area for market support if it is to achieve target sales levels per square foot. The consultants have determined that, as of this date, projections show substantial non-Newhall Land growth in population and no apparent competitive projects in locations as well suited to capturing this growth as the Entrada and Valencia Commerce Center communities. Nevertheless, the consultants feel that it is appropriate to note that this estimate, unlike most of the others in this report, relies on the realization of projections and development patterns outside the control of Newhall land.

Total Sales Tax

In order to estimate the amount of new retail spending that may be generated by Project residents, it is necessary to estimate both the household incomes of the new residents as well as their spending patterns. The household incomes were computed by estimating how much household income would be required to afford and occupy the residential units in the Project. This was done utilizing factors such as the value of the owner-occupied house or rent, the amount of household income commonly spent on housing and home financing parameters such as down payments and interest rates. The required household incomes were divided into ranges and for each range a spending pattern was applied to derive the amount of total retail spending and the taxable portion.

The data on retail spending patterns by income level were obtained from the Consumer Expenditure Survey compiled by the Bureau of Labor Statistics. Based on that data, households in the Project area will spend between 18% and 26% of their income on non-automotive retail purchases. Across all income levels, the portion of that retail spending spent on taxable purchases ranges from 86% to 89%. The estimate of spending by employees was based on survey data from the ICSC which has analyzed employee spending patterns.

In the first year, before retail in the Project is completed, it is estimated that the County will receive approximately \$48,000 in revenue that will come from sales tax on new purchases by Project residents outside the Project. The new annual sales tax revenue is estimated to rise to \$7.8 million in 2025 at full build-out. Approximately 66% of the County's sales tax revenue is expected to be generated by the new

retail space in the Project with the balance coming from residents' expenditures elsewhere in the unincorporated County.

The geographic distribution of retail facilities within the project is not at all uniform as between the six communities. The Entrada and Potrero communities will ultimately account for approximately 66% of the total taxable retail sales in the Project. Figure 4f presents total sales tax revenues at five points in time over the build-out.

Figure 4f

	2009	2013	2017	2021	2025
Retail Sales Taxes (000)	\$48	\$1,951	\$7,203	\$7,734	\$7,825

FRANCHISE FEES

These fees are charged to providers of services such as cable television in unincorporated areas. The amount of the revenues is considered to be generally correlated with the population in the unincorporated areas. Based on the County Fiscal Year 2005-2006 budget, the average annual per capita revenue to the County from this source is approximately \$7.00. This will produce approximately \$11,000 in revenues in the first year and rise to approximately \$520,000 at full build-out in 2025. The amounts of these revenues at five different points in time during the build-out are presented in Figure 4g.

Figure 4g

	2009	2013	2017	2021	2025
Franchise Fees (000)	\$11	\$173	\$395	\$502	\$520

VI. EXPENDITURES

SHERIFF

The County will provide law enforcement services to the Project via the Sheriff's Department. The cost of those services will be funded from the County's General Fund.

The Sheriff's Department provided an estimate of the cost of services to the Project. It is based on a specified level of staffing and the fully burdened cost per deputy. The level of service specified is one deputy per 1,000 residents. The current fully burdened annual cost per deputy is \$179,000. On that basis and at full build-out, the total annual cost for law enforcement services for the Project will equal approximately \$13.2 million. This is equivalent to approximately \$179 per capita based on resident population.

Figure 5a

	2009	2013	2017	2021	2025
Sheriff Costs (000)	\$291	\$4,399	\$10,036	\$12,743	\$13,200

For any jurisdiction law enforcement services are a function of the character of the area to be served and the desire on the part of elected officials to have a certain level of service. As a point of comparison for the estimate of the cost for the Project, the cost of contract law enforcement from the Sheriff's Department for the City of Santa Clarita was investigated. The City of Santa Clarita is generally similar demographically to the Project and has a very similar ratio of resident population to employees. The City of Santa Clarita currently pays approximately \$13.8 million per year for contract law enforcement services from the Sheriff's Department. This is equivalent to approximately \$82 per capita. The difference between these two per capita cost figures for generally similar areas is not known. However, it is a strong indicator that the estimated cost for the Project is very unlikely to be underestimated. Figure 5a presents the law enforcement cost for five points in time during the build-out.

FIRE PROTECTION

The Los Angeles County Fire Department will provide fire and paramedic services to the Project. Based on analyses by the County, the Project will require four fire stations to serve the Project. The County also provided an annual operating cost for each of the two fire stations. The costs ranged from \$2.4 million to \$4.4 million per station depending on the type of equipment at each station. The total annual cost for all four stations combined is \$12.5 million. The Valencia Commerce Center community is in the service area of an existing fire station which has sufficient available capacity to serve that community.

The County was not able to provide a timing or sequencing for the fire stations because they lacked the necessary data on exactly when each element of the Project would be built and in exactly what location.

In the absence of a schedule from the County, the consulting team developed a deliberately conservative schedule of fire station development in which each of four stations was provided at the beginning of the relevant development cycle. The annual costs of the four stations were incorporated, one by one, beginning with the first station in the first year that properties are sold. The cost of the

second station was added when the Project was 25% built-out. The cost of the third station was added when the Project was 50% built-out and the fourth was added when the Project was 75% built-out. This sequencing has the effect of the cost of a new station being incorporated in years one, four, seven and nine by which time the full cost of the fire protection is being borne. Figure 5b presents the expenditures at five different points in time during the build-out.

Figure 5b

	2009	2013	2017	2021	2025
Fire Protection Costs (000)	\$0	\$5,660	\$12,513	\$12,513	\$12,513

LIBRARY

The Los Angeles County Library will provide library services to the Project. The County has studied the need for library services for the Project and surrounding unincorporated areas. It has determined that the most reasonable approach to providing those library services for the area would be to construct an initial 30,000 square foot library and to later expand it to 60,000. The annual operating cost of the initial library would be approximately \$2.7 million. The annual operating cost of the 60,000 square foot library would be approximately \$4.6 million. Based on the build-out schedule for the Project and estimates of population growth in the other unincorporated areas to be served, the County has determined that the first library should begin operations in 2010 and the expanded should be completed in 2020.

The library is expected to ultimately serve a population of 117,000. The Project's 74,256 population represents approximately 65% of the total population that will be served. Therefore, the annual cost of the two different levels of library facilities will be multiplied by a 65% factor to compute the amount of the annual library cost that can fairly be allocated to the Project.

Based on this approach, the Project's annual library service costs will begin at approximately \$1.7 million in 2010 and rise to approximately \$2.9 million in 2020. Figure 5c presents the expenditures at five different points in time during the build-out.

Figure 5c

	2009	2013	2017	2021	2025
Library Costs (000)	\$0	\$1,714	\$1,714	\$2,940	\$2,940

PUBLIC WORKS

The principal costs to the County in the Public Works category will be the maintenance of public roadways. Those costs are commonly estimated in terms of dollars per lane mile which allows for roadways of different widths. The bulk of the costs are associated with periodic maintenance of the streets and adjacent rights of way as well as lighting. Newhall Land estimates that approximately 182 lane miles of local and major collector roadways in the Project that would be maintained by the County. Appendix Exhibit A-5 details the lane miles by individual community and major, collector or local classification, which will be maintained by the County. It should be pointed out that a significant amount of the local streets in the Project (both private and public-access) will maintained by special districts or homeowners' associations and not by the County.

The County provided estimates of costs per lane mile for both street maintenance and lighting for local and major collector streets. The annual street maintenance costs per lane mile are \$6,400 for major streets, \$5,600 for collector streets and \$4,700 for local streets. The annual cost per lane mile for lighting is \$4,500 for major and collector streets, and \$2,800 for local streets.

These costs are applied only to the publicly dedicated streets and explicitly exclude private streets within gated communities, the maintenance costs for which are covered by HOA or property owner association fees. Maintenance costs for a significant amount of the streets outside of the gated portions of the Project will also be maintained by special tax or assessment district funding.

The estimated annual Public Works expenditures are \$242,000 in the first year and rise to a total of \$1.7 million annually at full build-out in 2025. Figure 5d presents the annual expenditures at five different points of time during the build-out.

Figure 5d

	2009	2013	2017	2021	2025
Public Works Costs (000)	\$242	\$1,044	\$1,483	\$1,675	\$1,675

ANIMAL CARE AND CONTROL

The County will provide animal care and control services for the project. The County was not able to independently provide an estimate of the cost for the Project. In the absence of that information, the cost to the Project was estimated on a per capita basis. The County has budgeted a net cost for these services of approximately \$7.9 million in Fiscal Year 2005-2006. That is equivalent to \$7.29 per capita for the unincorporated areas of the County and may overstate the cost to provide the service in the Project. Nevertheless, that factor was used to estimate the Project's cost in this service area to avoid understating the cost. At that per capita cost, the County's annual expenditures will begin at approximately \$12,000 and rise to approximately \$541,000 at full build-out in 2025. Figure 5e presents the annual expenditures at five different points in time during the build-out.

Figure 5e

	2009	2013	2017	2021	2025
Animal Care & Control Costs (000)	\$12	\$180	\$412	\$523	\$541

PARKS AND RECREATION

The Parks and Recreation Department will incur costs in two different categories to serve the Project. The first is recreation services. This is the cost to provide various physical, educational and cultural programs and services. Levander estimated that the net per capita cost of recreation program services for unincorporated area residents was approximately \$4.65. Cumulative inflation since 1996 is 26.6%. In abundance of caution and in order to not under estimate the current cost, the 1996 cost was increased by two times the overall inflation rate. This produced an annual per capita cost of approximately \$7.00. As shown in Figure 5f, applying that factor to the Project results in an initial annual expenditure of approximately \$11,000 and rising to \$520,000 annually in 2025.

Figure 5f

	2009	2013	2017	2021	2025
Recreation Costs (000)	\$11	\$173	\$395	\$502	\$520

The other cost category is the physical maintenance of any public parkland not maintained by a special district. Newhall Land estimates that approximately 254 acres of active parkland in the project that will have to be maintained by the County. Any recreational land and open space that would not be maintained by the County was excluded. The County was not able to provide a current estimate of the annual cost of operating and maintaining an acre of active parkland. In the absence of a current per acre cost being provided by the County, a cost was extrapolated from the unit cost used by Levander in its 1996 fiscal analysis of the predecessor project.

Levander estimated a \$6,400 annual per acre cost in 1996 for active parks based on tabulations of actual unit costs provided by the Parks and Recreation Department. An inflation adjustment similar to that for recreation program services was applied to this cost factor. This produced an annual per acre cost of operations and maintenance of \$9,700. As presented in Figure 5g, applying that cost factor to the number of acres that will be maintained by the County results in an initial annual cost of \$49,000 rising to \$2.5 million in 2016 and thereafter, by which time all of the parkland will be in place.

Figure 5g

	2009	2013	2017	2021	2025
Parks Costs (000)	\$49	\$958	\$2,487	\$2,487	\$2,487

Exhibit 3 presents the annual cost or both recreation and parks expenditures at five different points in time during the build-out. There will be additional park land and open space in the Project which will not be a responsibility of the County to maintain. Maintenance of those facilities will be funded by HOA, special tax or assessment mechanisms. It is possible that Newhall Land will establish assessment districts to maintain some of the 254 acres of park land which it is assumed in this analysis will be maintained by the County from its general fund. If that occurs, the County will be relieved of \$9,700 in annual maintenance costs for every acre whose annual maintenance burden is transferred to an assessment district.

PLANNING

The County provides a full range of regional planning services in the unincorporated areas. The County was unable to provide an estimate of the cost of providing those services to the Project or to provide cost factors that could be used to derive a cost estimate. Consequently, it was decided to derive a per capita net cost factor for those services. In the County Fiscal Year 2005-2006 budget the net cost of providing regional planning services is approximately \$10.4 million. This is equivalent to \$9.57 per capita. Applying that per capita cost factor, produces an initial annual cost of \$16,000 in the first year that properties are completed. The annual expenditure rises to approximately \$711,000 in 2025. Figure 5h presents the annual cost for planning services at five different points of time during the build-out.

Figure 5h

	2009	2013	2017	2021	2025
Planning Costs (000)	\$16	\$237	\$541	\$686	\$711

Note that these costs exclude application fees and other charges. Therefore, they represent the net cost to the County and not the total cost of processing new proposals.

OTHER SERVICE CATEGORIES

Two other specific service categories are also associated with the unincorporated areas of the County. Those are the District Attorney and the Treasurer and Tax Collector. Discussions were held with representatives of each of those offices. Neither office believed that their operations would be affected in a material way as a consequence of the development of the Project.

GENERAL ADMINISTRATIVE SERVICES

The County provides a variety of support and overhead support to the various departments that provide direct services. In the 1996 fiscal analysis Levander determined that the cost of that overhead support cost the County approximately 7.7% of other activities. That analysis differed from this analysis in that it examined countywide services in addition to services that are associated only with unincorporated areas. Data is not available to allocate those general administrative service costs among countywide services and services for unincorporated areas. To avoid understating the cost of this overhead support services, a 10% factor has been used to compute the cost of providing general administrative services to accompany the other unincorporated area services for which individual costs have been estimated.

Figure 5i

	2009	2013	2017	2021	2025
General Administration Costs (000)	62	1,437	2,958	3,407	3,459

SPECIAL TAX AND ASSESSMENT CONSIDERATIONS

As mentioned previously, Newhall Land has announced its intention to establish both special districts and homeowners associations to fund the necessary annual operation and maintenance costs associated with a number of the facilities that will be constructed with the Project. Those facilities consist primarily of roadways. The presence of those funding mechanisms will very significantly reduce some of the usual funding burdens that the County bears in other unincorporated areas of the County. For the purpose of estimating annual County service expenditures, this analysis has focused on only those facilities that would in fact be operated and maintained by the County from its General Fund.

VII. NET IMPACT

COMBINED PROJECT

With the exception of the second year, the net fiscal impact of the Project will be positive (i.e., a surplus) and substantially so. A year-by-year tabulation of the individual categories of revenues and expenditures is presented in Exhibit 8. The somewhat anomalous condition in which in the first year is positive and the second year is negative is attributable to a one year delay in having to fund the new library facility and fire station.

The largest factor creating a negative fiscal impact in the second year is the need to construct and operate a new fire station at that point to serve the new houses that will be completed. That second year deficit is also attributable to cost of the new library, the first phase of which would begin operation in that year. Both of those facilities will have excess capacity during the first several years. The gross and net fiscal figures reach approximately 95% of their final amount in 2021, which is 13 years into the 16-year build-out term.

The large \$42.3 million surplus at full build-out represents 53% of total revenues. This existence of a large surplus is attributable to several factors. The most significant factor is the relatively large combined share of property tax revenues to which the County is entitled. That high share of property tax and the relatively high property values produces unusually large revenue per capita.

Contributing to that effect is the fact that the Project is an entirely new community. This means that it does not have on the tax rolls a large stock of properties that have not transacted for years. It is common in other communities for there to be a significant number of properties that are carried on the books at very low assessed value because their ownership has not changed for many years and their assessed value has lagged far behind market values. All of the properties in the Project will be going onto the tax rolls at their full market value.

Also of note is the very large contribution that the fire protection share of the general levy makes to total revenues. It is the largest component (even larger than the General Fund share) of the 1.00% property tax general levy.

An additional significant factor contributing to there being a large positive fiscal impact is Newhall Land's plan to create special funding mechanisms to cover a number of annual service costs that are usually the responsibility of the general fund of a city or county. These mechanisms will include HOA fees as well as special tax or assessment districts. They will fund significant amount of the annual maintenance for roadways in the communities.

One aspect of the expenditure figures is unusual compared to what is commonly found in fiscal analyses. That aspect is that the annual fire protection cost is very close to the annual law enforcement cost. It is common to find that law enforcement costs exceed fire protection costs by 25% to 30% or sometimes more. This raises the question of whether the law enforcement costs could be understated or the fire protection costs overstated. The consultants necessarily must respect the estimates provided by County personnel. The consulting team would hypothesize that the newness of the community, the absence of poverty, and the absence of large public venues as well as some gated portions of the Project all contribute to a lower policing costs while leaving fire protection unchanged at the same time that low development density and higher property values may contribute to higher fire protection costs.

As indicated in the section of the report dealing with expenditures, the current annual cost of the Sheriff's Department providing law enforcement services under contract to the adjacent City of Santa Clarita is approximately \$82 per capita. As indicated in that section the Sheriff's Department estimates the law enforcement costs for the Project will be \$179 per capita. That is a 118% higher cost than the contract services for the City of Santa Clarita. This suggests that the law enforcement costs are not likely to be understated. The fire protection expenditures are based on budget figures provided by the County after careful analysis of the Project's development characteristics. Thus, they are not likely to be overstated. The relative relationship between the law enforcement and fire protection expenditures may be attributable to the level of fire protection service being particularly extensive compared to a less severe law enforcement burden.

INDIVIDUAL COMMUNITIES

Breakdowns of the total revenues and expenditures for the seven different communities at five different points in time during the build-out term are presented in Exhibit 9. Breakdowns for individual revenue and expenditure line items for each community at full build-out are presented in Exhibit 10.

As a percent of the entire Project's net fiscal impact, Entrada at 24% and Potrero at 23% are the largest contributors. The principal factors in their large contribution to the entire Project's positive net fiscal revenue is the relatively large amount of sales tax being generated by both and the transient occupancy tax generated by the hotel in Entrada. Potrero also has a significantly higher total assessed value than the other communities.

SURPLUS OVER TIME

The results described in Exhibits 3 and 8 show a significant fiscal surplus to the County at full build-out. This surplus, which would appear to apply to each of the communities separately and in the aggregate amounts to approximately \$42.3 million a year, requires some further discussion. There are two reasons that such a discussion is needed. One is the fact that the surplus is somewhat counterintuitive since residential development, which is the dominant form of development under study here, often yields negative rather than positive fiscal impacts. A second factor has to do with a convention adopted in the analysis which is to use only constant uninflated 2006 dollars.

In this section of the report, there will be a brief discussion of the reasons for this surplus and why they are not ultimately consistent with the more intuitive judgment that housing development, particularly under Proposition 13, is not "profitable" for cities. Separately, there will be a discussion of both the consequences and the implications of using constant uninflated dollars. The reason for this latter discussion is the fact that Proposition 13 does materially change the way in which assessed value and, by extension, property tax revenues fail to keep up with housing values. This phenomenon requires some discussion and analysis.

Origins of the Surplus

Broadly speaking, there appear to be three critical reasons for the fact that this analysis shows a substantial surplus:

1. All properties are "fully assessed".

2. Their properties are generally higher valued properties than county-wide medians.
3. Newhall Land has incorporated a significant number, though by no means all or even a majority, of municipal services in private development thereby relieving the County of some otherwise anticipated costs.

Each of these three warrants some further brief discussion.

At any given point in time, the property tax revenue from an older and settled area reflects a mixture of homes that have not been reassessed for long periods of time, a modest number of new homes, and an indeterminate number of homes that have recently turned over in the resale market and consequently have had their property tax income brought up to "full assessment".

In the analysis presented herein, all the properties are the equivalent of "fully assessed" because at the point where the analysis is being done, they are all "new". In part, this is an artifact of using constant dollars. The consulting team seriously considered whether or not to incorporate housing inflation, and concluded that such incorporation would create more problems than it would resolve. First of all, there was the issue of which housing inflation or appreciation rate to use. Recent inflation rates consistently in strong double digits may not be an appropriate characterization of the next 17 years. At the same time, if one set of numbers incorporates inflation, then the question becomes should all the other numbers --- notably including the costs of providing County services --- be also inflated and, if so, by what rate.

Accordingly, the originally stipulated framework for analysis, i.e. constant uninflated 2006 dollars, was maintained. In so doing, there is some risk that the impact of slower than "real" inflation in assessed value, due to Proposition 13, is possible. This will be discussed at greater length below.

The second major reason is that the housing proposed by Newhall Land for the west side of the I-5 Freeway in the six communities under study is generally higher than the median value of new housing in the area or for that matter in the County as a whole. This also leads to larger revenues relative to costs than would otherwise be expected in some sort of normal distribution of prices.

Finally, many parts of the proposed six communities will in fact be private gated communities, or pay directly for services and infrastructure maintenance through the use of locally funded municipal services entities of various types. Lighting and landscaping districts and in some cases actual private streets will all mitigate the costs otherwise normally incurred by the County in supporting residential development.

Collectively, these three factors account for the surplus.

Exhibit 8: Summary of Expenditures and Revenues Inputs, By Community and Land Use

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
EXP./REVENUES' INPUTS ^{/1}																	
Absorption - Units	528	2,246	4,066	6,623	9,478	12,689	15,833	18,563	21,036	23,486	25,094	26,142	26,908	27,478	27,782	27,893	27,893
Absorption - SF	0	416,970	1,171,256	2,039,192	3,316,300	5,915,205	6,863,988	8,708,389	10,267,553	10,537,716	10,611,049	10,684,383	10,757,716	10,831,049	10,867,716	10,867,716	10,867,716
Population	1,636	6,239	10,883	17,333	24,745	33,365	42,064	49,560	56,459	62,629	66,661	69,556	71,682	73,237	73,987	74,256	74,256
Employees	0	1,252	3,403	5,670	9,206	15,171	17,574	23,977	29,998	31,079	31,372	31,666	31,959	32,252	32,399	32,399	32,399
Assessed Value (In Mn \$'s)	300.5	1,197.7	2,473.3	3,977.5	5,875.8	8,062.9	9,939.4	12,164.2	14,138.4	15,461.3	16,314.2	16,881.9	17,297.0	17,595.3	17,747.2	17,805.7	17,805.7
New Retailers' Sales (Mn \$'s)	0.0	14.1	40.0	86.4	107.9	169.7	186.2	351.9	517.6	517.6	517.6	517.6	517.6	517.6	517.6	517.6	517.6
Residents' Retail Expenditure (Mn \$'s)	16.5	68.4	126.9	202.5	293.1	407.2	512.2	616.3	710.0	788.6	839.4	872.8	897.5	916.3	926.3	930.0	930.0
Total Property Tax (Mn \$'s)	3.0	12.0	24.7	39.8	58.8	80.6	99.4	121.6	141.4	154.6	163.1	168.8	173.0	176.0	177.5	178.1	178.1
REVENUES (\$ 000's) ^{/3}																	
Taxes																	
Property - General Levy																	
Adjusted County Unrestricted ^{/4}	485	1,805	3,509	5,499	8,051	10,965	13,464	16,460	19,072	20,739	21,812	22,526	23,046	23,415	23,602	23,673	23,673
Library	69	293	633	1,037	1,549	2,153	2,671	3,265	3,794	4,154	4,385	4,540	4,653	4,734	4,776	4,792	4,792
Fire	536	2,182	4,582	7,423	11,021	15,237	18,855	23,054	26,779	29,292	30,909	31,986	32,774	33,342	33,631	33,742	33,742
Total General Levy	1,091	4,279	8,724	13,959	20,620	28,355	34,990	42,779	49,645	54,185	57,107	59,052	60,473	61,491	62,009	62,207	62,207
Property - Special Taxes																	
Library	14	58	105	170	244	326	407	477	541	604	645	672	692	707	715	717	717
Fire	26	103	225	362	544	797	978	1,178	1,352	1,464	1,535	1,589	1,630	1,661	1,678	1,684	1,684
Total Special Taxes	40	161	329	532	788	1,123	1,385	1,655	1,893	2,068	2,180	2,261	2,322	2,368	2,393	2,401	2,401
Retail Sales Tax																	
Project Area Retailers	0	141	400	864	1,079	1,697	1,862	3,519	5,176	5,176	5,176	5,176	5,176	5,176	5,176	5,176	5,176
Other Retailers ^{/2}	48	196	374	598	872	1,192	1,488	1,772	2,027	2,248	2,393	2,488	2,558	2,611	2,639	2,649	2,649
Total Sales Tax	48	337	774	1,462	1,951	2,889	3,350	5,291	7,203	7,425	7,569	7,664	7,734	7,787	7,815	7,825	7,825
Utility User Tax																	
Residential Units	57	243	439	715	1,024	1,370	1,710	2,005	2,272	2,536	2,710	2,823	2,906	2,968	3,000	3,012	3,012
Commercial Uses	0	88	243	416	675	1,168	1,358	1,773	2,142	2,209	2,226	2,244	2,261	2,279	2,288	2,288	2,288
Total Utility User Taxes	57	331	682	1,131	1,699	2,539	3,068	3,778	4,414	4,745	4,936	5,067	5,167	5,246	5,288	5,300	5,300
Transient Occupancy	0	0	0	0	0	0	0	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232
Documentary Transfer	166	507	770	962	1,262	1,587	1,523	1,679	1,665	1,456	1,270	1,157	1,101	1,059	990	941	908
Franchise Fee	11	44	76	121	173	234	294	347	395	438	467	487	502	513	518	520	520
TOTAL REVENUES	1,412	5,659	11,356	18,168	26,493	36,727	44,611	56,761	66,448	71,549	74,761	76,920	78,530	79,696	80,244	80,426	80,394
EXPENDITURES (\$ 000's) ^{/5}																	
Sheriff	291	1,109	1,935	3,081	4,399	5,931	7,478	8,810	10,036	11,133	11,850	12,364	12,743	13,019	13,152	13,200	13,200
Fire & EMS	0	3,200	3,200	5,660	5,660	5,660	10,053	10,053	12,513	12,513	12,513	12,513	12,513	12,513	12,513	12,513	12,513
Library	0	1,714	1,714	1,714	1,714	1,714	1,714	1,714	1,714	1,714	1,714	1,714	1,714	1,714	1,714	1,714	1,714
Public Works	242	470	689	925	1,044	1,234	1,308	1,383	1,483	1,580	1,613	1,646	1,675	1,675	1,675	1,675	1,675
Animal Care & Control	12	45	79	126	180	243	307	361	412	457	486	507	523	534	539	541	541
Parks	49	166	563	860	958	1,007	1,056	2,438	2,487	2,487	2,487	2,487	2,487	2,487	2,487	2,487	2,487
Recreation	11	44	76	121	173	234	294	347	395	438	467	487	502	513	518	520	520
Planning	16	60	104	166	237	319	403	475	541	600	638	666	686	701	708	711	711
General Admin	62	681	836	1,265	1,437	1,634	2,261	2,558	2,958	3,092	3,177	3,361	3,407	3,438	3,453	3,459	3,459
TOTAL EXPENDITURES	682	7,488	9,196	13,920	15,802	17,977	24,875	28,139	32,540	34,015	34,946	36,972	37,476	37,821	37,987	38,047	38,047
SURPLUS/(DEFICIT) (\$ 000's) ^{/6}	730	-1,830	2,160	4,248	10,691	18,750	19,736	28,622	33,908	37,534	39,816	39,948	41,054	41,875	42,257	42,380	42,347

Notes:

^{/1} Refer Summary Exhibits 5.0 thru 5.6 for break-up of Costs & Revenues' Drivers by Community & Consolidated Product.

^{/2} Expenditure by Residents & Employees of Project Area at those retailers in Unincorporated LA County outside of Newhall Ranch Project Area.

^{/3} Refer Assumptions Exhibit A-1 for Standards & Methodology for deriving each Revenue item.

^{/4} The County Unrestricted portion of the Property Tax General Levy is adjusted for only the County share from Unincorporated Area

^{/5} Refer Assumptions Exhibit B-1 for Standards & Methodology for deriving each Expenditure item.

^{/6} All Amounts are in Uninflated 2006 Dollars.

Exhibit 9

Revenues and Expenditures, by Community and Development Phase

Project Area Community	In \$ 000's					As Percentage of Total Revenues/Expenditures				
	2009	2013	2017	2021	2025	2009	2013	2017	2021	2025
ALL PROJECT										
Revenues	\$1,412	\$26,493	\$66,448	\$78,530	\$80,394					
Expenditures	<u>682</u>	<u>15,802</u>	<u>32,540</u>	<u>37,476</u>	<u>38,047</u>					
Surplus/(Deficit)	730	10,691	33,908	41,054	42,347					
ENTRADA										
Revenues	\$0	\$1,456	\$13,681	\$15,161	\$15,286	0%	5%	21%	19%	19%
Expenditures	<u>0</u>	<u>899</u>	<u>3,630</u>	<u>4,203</u>	<u>4,126</u>	<u>0%</u>	<u>6%</u>	<u>11%</u>	<u>11%</u>	<u>11%</u>
Surplus/(Deficit)	0	557	10,050	10,958	11,160	0%	5%	30%	27%	26%
HOMESTEAD										
Revenues	\$0	\$5,615	\$14,118	\$14,427	\$14,427	0%	21%	21%	18%	18%
Expenditures	<u>0</u>	<u>3,687</u>	<u>7,943</u>	<u>7,591</u>	<u>7,466</u>	<u>0%</u>	<u>23%</u>	<u>24%</u>	<u>20%</u>	<u>20%</u>
Surplus/(Deficit)	0	1,928	6,175	6,836	6,962	0%	18%	18%	17%	16%
POTRERO										
Revenues	\$0	\$0	\$9,470	\$19,436	\$21,174	0%	0%	14%	25%	26%
Expenditures	<u>0</u>	<u>0</u>	<u>5,645</u>	<u>11,395</u>	<u>12,397</u>	<u>0%</u>	<u>0%</u>	<u>17%</u>	<u>30%</u>	<u>33%</u>
Surplus/(Deficit)	0	0	3,824	8,041	8,777	0%	0%	11%	20%	21%
MISSION VILLAGE										
Revenues	\$159	\$10,460	\$12,660	\$12,925	\$12,925	11%	39%	19%	16%	16%
Expenditures	<u>180</u>	<u>7,317</u>	<u>7,424</u>	<u>6,815</u>	<u>6,698</u>	<u>26%</u>	<u>46%</u>	<u>23%</u>	<u>18%</u>	<u>18%</u>
Surplus/(Deficit)	-22	3,143	5,236	6,110	6,227	-3%	29%	15%	15%	15%
LEGACY										
Revenues	\$0	\$1,068	\$8,130	\$8,192	\$8,192	0%	4%	12%	10%	10%
Expenditures	<u>0</u>	<u>1,139</u>	<u>5,278</u>	<u>5,008</u>	<u>4,929</u>	<u>0%</u>	<u>7%</u>	<u>16%</u>	<u>13%</u>	<u>13%</u>
Surplus/(Deficit)	0	-71	2,852	3,184	3,263	0%	-1%	8%	8%	8%
LANDMARK										
Revenues	\$1,253	\$3,398	\$3,665	\$3,665	\$3,665	89%	13%	6%	5%	5%
Expenditures	<u>502</u>	<u>2,694</u>	<u>2,507</u>	<u>2,351</u>	<u>2,318</u>	<u>74%</u>	<u>17%</u>	<u>8%</u>	<u>6%</u>	<u>6%</u>
Surplus/(Deficit)	752	704	1,158	1,314	1,346	103%	7%	3%	3%	3%
COMMERCE CENTER										
Revenues	\$0	\$4,495	\$4,724	\$4,724	\$4,724	0%	17%	7%	6%	6%
Expenditures	<u>0</u>	<u>66</u>	<u>113</u>	<u>113</u>	<u>113</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>	<u>0%</u>
Surplus/(Deficit)	0	4,429	4,612	4,612	4,612	0%	41%	14%	11%	11%

Note: All Dollar Amounts are in Uninflated 2006 Dollars

Exhibit 10

Amount of Revenues and Expenditures, by Community, at Build-Out

Expenditure/Revenue Items	Entrada	Homestead	Potrero	Mission	Legacy	Landmark	Commerce Center	Project
REVENUES (\$ 000's)	15,286	14,427	21,174	12,925	8,192	3,665	4,724	80,394
Property - General Levy	9,557	12,210	17,035	10,408	6,704	2,974	3,319	62,207
Property - Special Taxes	361	473	667	412	252	105	131	2,401
Retail Sales Tax	2,950	595	1,852	978	580	271	600	7,825
Utility User Tax	1,008	846	1,184	882	486	244	650	5,300
Transient Occupancy	1,232	0	0	0	0	0	0	1,232
Documentary Transfer	117	200	274	154	98	41	25	908
Franchise Fee	61	103	163	91	71	30	0	520
EXPENDITURES (\$ 000's)	4,126	7,466	12,397	6,698	4,929	2,318	113	38,047
Sheriffs	1,554	2,627	4,146	2,310	1,803	760	0	13,200
Fire Protection	1,586	2,546	3,781	2,392	1,561	648	0	12,513
Library	346	585	923	514	402	169	0	2,940
Public Works	56	481	384	215	273	165	102	1,675
Animal Care & Control	64	108	170	95	74	31	0	541
Parks	0	196	1,480	348	200	264	0	2,487
Recreation	61	103	163	91	71	30	0	520
Planning	84	141	223	124	97	41	0	711
General Admin	375	679	1,127	609	448	211	10	3,459
SURPLUS/(DEFICIT)	11,160	6,962	8,777	6,227	3,263	1,346	4,612	42,347

Note: All Dollar Amounts are in Uninflated 2006 Dollars

Shares of Revenues and Expenditures, by Community, at Build-Out

Expenditure/Revenue Items	Entrada	Homestead	Potrero	Mission	Legacy	Landmark	Commerce Center	Project
REVENUES	19.0%	17.9%	26.3%	16.1%	10.2%	4.6%	5.9%	100.0%
Property - General Levy	15.4%	19.6%	27.4%	16.7%	10.8%	4.8%	5.3%	100.0%
Property - Special Taxes	15.0%	19.7%	27.8%	17.2%	10.5%	4.4%	5.5%	100.0%
Retail Sales Tax	37.7%	7.6%	23.7%	12.5%	7.4%	3.5%	7.7%	100.0%
Utility User Tax	19.0%	16.0%	22.3%	16.6%	9.2%	4.6%	12.3%	100.0%
Transient Occupancy	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Documentary Transfer	12.9%	22.0%	30.1%	16.9%	10.8%	4.5%	2.8%	100.0%
Franchise Fee	11.8%	19.9%	31.4%	17.5%	13.7%	5.8%	0.0%	100.0%
EXPENDITURES	10.8%	19.6%	32.6%	17.6%	13.0%	6.1%	0.3%	100.0%
Sheriffs	11.8%	19.9%	31.4%	17.5%	13.7%	5.8%	0.0%	100.0%
Fire Protection	12.7%	20.3%	30.2%	19.1%	12.5%	5.2%	0.0%	100.0%
Library	11.8%	19.9%	31.4%	17.5%	13.7%	5.8%	0.0%	100.0%
Public Works	3.3%	28.7%	22.9%	12.9%	16.3%	9.8%	6.1%	100.0%
Animal Care & Control	11.8%	19.9%	31.4%	17.5%	13.7%	5.8%	0.0%	100.0%
Parks	0.0%	7.9%	59.5%	14.0%	8.0%	10.6%	0.0%	100.0%
Recreation	11.8%	19.9%	31.4%	17.5%	13.7%	5.8%	0.0%	100.0%
Planning	11.8%	19.9%	31.4%	17.5%	13.7%	5.8%	0.0%	100.0%
General Admin	10.8%	19.6%	32.6%	17.6%	13.0%	6.1%	0.3%	100.0%
SURPLUS/(DEFICIT)	26.4%	16.4%	20.7%	14.7%	7.7%	3.2%	10.9%	100.0%

Note: All Dollar Amounts are in Uninflated 2006 Dollars

Exhibit 10 (Continued)

Shares of Revenues and Expenditures, within Community, at Build-Out

Expenditure/Revenue Items	Entrada	Homestead	Potrero	Mission	Legacy	Landmark	Commerce Center	Project
REVENUES	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Property - General Levy	62.5%	84.6%	80.5%	80.5%	81.8%	81.1%	70.3%	77.4%
Property - Special Taxes	2.4%	3.3%	3.2%	3.2%	3.1%	2.9%	2.8%	3.0%
Retail Sales Tax	19.3%	4.1%	8.7%	7.6%	7.1%	7.4%	12.7%	9.7%
Utility User Tax	6.6%	5.9%	5.6%	6.8%	5.9%	6.7%	13.8%	6.6%
Transient Occupancy	8.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%
Documentary Transfer	0.8%	1.4%	1.3%	1.2%	1.2%	1.1%	0.5%	1.1%
Franchise Fee	0.4%	0.7%	0.8%	0.7%	0.9%	0.8%	0.0%	0.6%
EXPENDITURES	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Sheriffs	37.7%	35.2%	33.4%	34.5%	36.6%	32.8%	0.0%	34.7%
Fire Protection	38.4%	34.1%	30.5%	35.7%	31.7%	27.9%	0.0%	32.9%
Library	8.4%	7.8%	7.4%	7.7%	8.1%	7.3%	0.0%	7.7%
Public Works	1.3%	6.4%	3.1%	3.2%	5.5%	7.1%	90.9%	4.4%
Animal Care & Control	1.5%	1.4%	1.4%	1.4%	1.5%	1.3%	0.0%	1.4%
Parks	0.0%	2.6%	11.9%	5.2%	4.1%	11.4%	0.0%	6.5%
Recreation	1.5%	1.4%	1.3%	1.4%	1.4%	1.3%	0.0%	1.4%
Planning	2.0%	1.9%	1.8%	1.9%	2.0%	1.8%	0.0%	1.9%
General Admin	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%	9.1%
SURPLUS/(DEFICIT) /1	73.0%	48.3%	41.5%	48.2%	39.8%	36.7%	97.6%	52.7%

¹/1 Surplus/(Deficit) as a percentage of Total Revenues for respective Communities.

Note: All Dollar Amounts are in Uninflated 2006 Dollars

IMPLICATION OF THE USE OF CONSTANT DOLLARS

Since the passage of Proposition 13 in 1978, assessed values, on which most property taxes are based, no longer reliably track actual market values on a current basis since re assessment occurs only on sale. This "lagging" effect creates a calculation problem in determining fiscal impact using constant dollars. Constant dollars reliably reflect the balance between revenues and costs only if increases in property assessed valuation, which accounts for the bulk of County revenues, precisely parallel the inflation in municipal service costs. Under Proposition 13, however, this is clearly not the case since it is likely, perhaps even inevitable, that growth in assessed valuation will lag the growth in housing values.

Although assessed values will always lag behind changes in market value, it is possible that even so assessed value will keep up with general inflation. For over sixty years, real estate values have, on average, inflated at a higher rate than the general inflation rate. Therefore some of the lag factor associated with Proposition 13 and the lack of reassessment except at sale will be offset by the premium associated with "real" real estate appreciation.

Another issue to be considered is the fact County service costs are likely to rise faster than general inflation. Such costs are dominated by labor costs and labor costs have traditionally risen more rapidly than general inflation---although that has not been true in the current extended recovery. Over the planning horizon of this analysis it is possible---even likely---that there will a higher than average inflation rate for municipal service costs.

As noted earlier in this report, any attempt to quantify these impacts requires a whole host of complex assumptions the detailed resolution of which is out the scope of this analysis. Nevertheless, it is appropriate and perhaps even necessary, to consider how much the apparent surplus advantage of this project might deteriorate as a function of the lag in property values assessment as compared to ongoing inflation in municipal service costs.

To illustrate the potential for a deterioration in the estimated surplus, the consulting team has prepared an example analysis shown in Exhibit 20. In this Exhibit, assumptions are made about the different rates of inflation in different components and also the turnover in housing.

It is assumed, based on historical research undertaken by ADK&A that the long term rate of housing inflation is at least 1.25% greater than the long term rate of general inflation. Research, based in part on the index of housing values maintained by the Real Estate Research Committee of Southern California, supports this differential.

ADK&A and CB Richard Ellis Consulting have no formal data on the increase in municipal service costs. This increase is, itself, a very complex factor reflecting a change in the scope of mandates as well as the change in actual service costs for a constant bundle of functions. In an attempt to be deliberately conservative, the consulting team has used an assumed 2% premium over general inflation for municipal service costs.

Once again, it is important to realize that this is merely an illustration to demonstrate that, even with the differential inflation rates and the lag time associated with property values, the surplus would be maintained throughout the 17 years covered in this analysis. It would, however, cause the surplus to deteriorate as a proportion of total revenue. By the end of the period, the surplus would represent 48% of total revenues as compared to 59% at the beginning.

In the particular set of assumptions shown in Exhibit 11, it is assumed that the average turnover in housing is ten years or 10% per year. This is a deliberately conservative assumption with respect to ownership housing which is the dominant land use. Builder association and census statistics suggest 7-8 years as an average length on tenure. On the other hand, commercial properties tend to turn over at a slower rate.

It is further assumed that there is a premium for housing inflation of 1.25% and that in the absence of turnover of housing, the property values and assessed valuation occur at the statutory rate of 2%.

Based on analysis of several of the individual communities, it is assumed that at "stabilization", the surplus of revenues over municipal service costs represents roughly 48% of revenues.

For a hypothetical \$10 million of fiscal impacts, this would be a surplus of \$5.9 million.

It appears that approximately 81% of fiscal revenue is generated by property tax.

Combining these assumptions shows that there is in fact some deterioration of the surplus as a proportion of total revenue due to the assumed higher rate of inflation in municipal service costs than in real estate. In whole dollars, the surplus continues to grow. Notwithstanding this differential, even at the end of 17 years, there is a surplus roughly equal to 48% of total revenues.

In conclusion, it may be said that the factors that create the surplus while subject to some degradation over time are in fact fairly stable, and the County should be able to look forward to a continued substantial surplus of revenues over expenses for the full duration of this analysis.

Exhibit 11:

Simplified Illustrative Analysis of Differential Inflation Rates

GENERAL ASSUMPTIONS

Property Tax Revenues as Proportion of Total Revenue 80.48% based on Prop. Tax = \$61.0 out of a total revenue= \$75.8
Initial Service Costs as Proportion of Total Revenue 41.03% based on total costs= \$31.1

	Property Tax	Other Revenue	Total Revenue	Service Costs	Surplus (Deficit) Amount	As Percent of Revenues	As Percent of Costs
SPECIFIC ASSUMPTIONS							
Annual Turnover Rate	10.00%						
Core Inflation Rate	3.00%	3.00%		3.00%			
Premium Over Core Rate	1.25%	0.00%		2.00%			
Combined Assumed Rate	4.25%	3.00%		5.00%			
Statutory Rate for Non Turnover	2.00%						
Initial Total Revenue			\$10.00				
0	\$8.05	\$1.95	\$10.00	\$4.10	\$5.90	59.0%	143.7%
1	8.23	2.01	10.24	4.31	5.93	57.9%	137.6%
2	8.43	2.07	10.50	4.52	5.98	56.9%	132.1%
3	8.66	2.13	10.79	4.75	6.04	56.0%	127.1%
4	8.91	2.20	11.10	4.99	6.12	55.1%	122.7%
5	9.19	2.26	11.45	5.24	6.21	54.3%	118.7%
6	9.50	2.33	11.83	5.50	6.33	53.5%	115.2%
7	9.84	2.40	12.24	5.77	6.47	52.8%	112.1%
8	10.22	2.47	12.69	6.06	6.63	52.2%	109.4%
9	10.63	2.55	13.18	6.36	6.81	51.7%	107.0%
10	11.08	2.62	13.71	6.68	7.02	51.2%	105.1%
11	11.55	2.70	14.26	7.02	7.24	50.8%	103.2%
12	12.05	2.78	14.83	7.37	7.46	50.3%	101.2%
13	12.56	2.87	15.42	7.74	7.69	49.8%	99.4%
14	13.09	2.95	16.04	8.12	7.92	49.4%	97.5%
15	13.65	3.04	16.69	8.53	8.16	48.9%	95.7%
16	14.23	3.13	17.36	8.96	8.40	48.4%	93.8%
17	14.83	3.23	18.06	9.40	8.65	47.9%	92.0%

Derivation of Real Estate Rate Assessed Value Growth Assuming Even Sequence of Turnover

Share of total Property	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	100.00%
Year	Year-End Value of Each Cohort As Proportion of Original (Boxed Numbers Indicate Turnover)											Total Value
1	104.25%	102.00%	102.00%	102.00%	102.00%	102.00%	102.00%	102.00%	102.00%	102.00%	102.00%	102.23%
2	106.34%	108.68%	104.04%	104.04%	104.04%	104.04%	104.04%	104.04%	104.04%	104.04%	104.04%	104.73%
3	108.46%	110.85%	113.30%	106.12%	106.12%	106.12%	106.12%	106.12%	106.12%	106.12%	106.12%	107.55%
4	110.63%	113.07%	115.57%	118.11%	108.24%	108.24%	108.24%	108.24%	108.24%	108.24%	108.24%	110.68%
5	112.84%	115.33%	117.88%	120.48%	123.13%	110.41%	110.41%	110.41%	110.41%	110.41%	110.41%	114.17%
6	115.10%	117.64%	120.23%	122.89%	125.60%	128.37%	112.62%	112.62%	112.62%	112.62%	112.62%	118.03%
7	117.40%	119.99%	122.64%	125.34%	128.11%	130.94%	133.82%	114.87%	114.87%	114.87%	114.87%	122.29%
8	119.75%	122.39%	125.09%	127.85%	130.67%	133.55%	136.50%	139.51%	117.17%	117.17%	117.17%	126.97%
9	122.15%	124.84%	127.59%	130.41%	133.28%	136.23%	139.23%	142.30%	145.44%	119.51%	119.51%	132.10%
10	124.59%	127.34%	130.15%	133.02%	135.95%	138.95%	142.01%	145.15%	148.35%	151.62%	121.71%	137.71%
11	158.07%	129.88%	132.75%	135.68%	138.67%	141.73%	144.85%	148.05%	151.32%	154.65%	143.56%	
12	161.23%	164.78%	135.40%	138.39%	141.44%	144.56%	147.75%	151.01%	154.34%	157.75%	149.67%	
13	164.45%	168.08%	171.79%	141.16%	144.27%	147.45%	150.71%	154.03%	157.43%	160.90%	156.03%	
14	167.74%	171.44%	175.22%	179.09%	147.16%	150.40%	153.72%	157.11%	160.58%	164.12%	162.66%	
15	171.10%	174.87%	178.73%	182.67%	186.70%	153.41%	156.80%	160.25%	163.79%	167.40%	169.57%	
16	174.52%	178.37%	182.30%	186.32%	190.43%	194.63%	159.93%	163.46%	167.07%	170.75%	176.78%	
17	178.01%	181.93%	185.95%	190.05%	194.24%	198.53%	202.91%	166.73%	170.41%	174.17%	184.29%	

Source: Allan D. Kotin & Associates

VIII. ONE-TIME ECONOMIC IMPACT

DEFINITIONS

Economic impacts are generally estimated in terms of output (in dollars), payroll and jobs. This differs from fiscal impacts which are actual dollar revenues or expenditures by a governmental entity. The jobs component is quantified in terms of full time equivalents ("FTE"). Each of those impacts is divided into direct, indirect and induced components. Direct impacts are those associated with the specific activity being analyzed. In the case of the Project, the direct activity would consist of the actual development and construction of the Project elements on site. Indirect impacts result from spending by the businesses (such as purchases from their suppliers) involved in the direct activity. Induced impacts consist of the spending by households that have received income from the direct and indirect activities. The addition of the indirect and induced economic activity to the direct activity is often referred to as the multiplier or effect or "spin off."

LOS ANGELES AND VENTURA COUNTIES

To estimate the one-time economic impacts, factors had to be derived that could be applied to various Project specifications. To derive those factors, it was necessary to define three prototype developments that represent the types that would occur in the Project. The developments include 100 units of single-family housing, 100 units of multi-family housing and 100,000 square feet of commercial space.

While the actual construction will take place in Los Angeles County, supplier purchases could be made from vendors in either county or elsewhere. In addition, workers may live in either county and generate household spending near their place of residence. This analysis focuses on the impact on Los Angeles County and Ventura County. Figure 6 on following page summarizes the output of this analysis.

The following describes the approach used to estimate the impacts. The IMPLAN economic impact model created by Minnesota IMPLAN Group, Inc. was used in the analysis. It is very widely used for estimating the economic impact of projects. The first step consisted of estimating the total impacts of construction for each project type on the two-county area. While multipliers exist for each county individually, they are not designed to calculate impacts comparatively. Using combined two-county multipliers, it is possible to estimate direct, indirect, induced and total impacts for each type prototype development. Each aspect of the impact is represented in terms of dollar output, payroll, and number of jobs. The direct output is the estimated total construction cost. Direct jobs and payroll correspond to the workers on the site in the Project. All of these numbers are annualized.

Indirect impacts represent business-to-business purchases. Output can be interpreted as the increase in demand for supplies as a result of the direct construction project activity. As suppliers increase their production to meet this demand, they in turn create additional jobs and payroll. These jobs, payroll and production are spread across a wide range of local businesses in the two-county area.

Induced impacts primarily represent consumer type purchases made by the direct and indirect employees and their families. The total economic impact is the sum of these three components.

The next step involved allocating the impacts between the two counties. Los Angeles and Ventura counties are very disparate in size and economic diversity, so even though a portion of the Project is

adjacent to the Ventura County line, the vast majority of impacts would likely occur in Los Angeles County. All direct impacts are by definition in Los Angeles County at the site of the Project.

Figure 6
Comparative Impacts of Project
Los Angeles and Ventura Counties
(Thousands of 2006 Dollars)

	Direct Impacts			Indirect Impacts			Induced			Total Impacts		
	Output	Payroll	Jobs	Output	Payroll	Jobs	Output	Payroll	Jobs	Output	Payroll	Jobs
100 Single Family Units												
Los Angeles	\$24,500	\$8,429	157	\$9,876	\$3,923	92	\$9,531	\$3,359	89	\$43,907	\$15,710	337
Ventura	0	0	0	653	287	7	758	267	7	1,410	554	14
Total	24,500	8,429	157	10,528	4,209	99	10,289	3,626	96	45,318	16,264	351
100 Multi Family Units												
Los Angeles	\$13,200	\$5,892	109	\$4,200	\$1,728	40	\$5,867	\$2,067	55	\$23,267	\$9,687	203
Ventura	0	0	0	300	134	3	466	164	4	766	298	7
Total	13,200	5,892	109	4,500	1,862	43	6,333	2,232	59	24,033	9,986	210
100,000 SF Non-Residential												
Los Angeles	\$16,000	\$9,016	169	\$5,430	\$2,249	48	\$8,652	\$3,049	80	\$30,082	\$14,314	298
Ventura	0	0	0	380	175	4	688	242	6	1,068	417	10
Total	16,000	9,016	169	5,810	2,423	52	9,340	3,291	87	31,150	14,731	308

In order to distribute the indirect impacts, it is necessary to break those impacts down by industry. The indirect output impacts are converted into indirect job impacts using industry-specific job multipliers that define the relationship between number of jobs and output by industry. Jobs are distributed based on the share of jobs by industry in each county and summed. Payroll was distributed based on the share of jobs in each county.

The distribution of induced impacts is more straightforward since the availability of consumer goods and services is fairly evenly distributed throughout the urbanized area. In this case, place of residence is assumed to be the driver for consumer purchases by construction workers and the supplier industry workers. Thus, induced impacts are distributed based on the relative population of each county. Since Los Angeles has a population of over 10 million, while Ventura County has a population of only 813,000, most of the impacts will occur in Los Angeles County. From a transportation and access perspective, the Project location is also linked more directly to Los Angeles County than to Ventura County.

The impact factors derived for the three representative prototype developments were applied to the actual Project development specifications over the full build-out term. This produced the total projected cumulative economic impact for the Project in both Los Angeles and Ventura counties. For all components of the Project (and combining direct, indirect and induced impacts), the dollar value of the total output that will occur in both counties is approximately \$13.0 billion. The total new payroll impact in both counties will be approximately \$5.2 billion. The jobs impact (direct construction and others) for the two counties will be approximately 111,500 man-years of employment. The distribution of these benefits is approximately 97% to Los Angeles County and 3% to Ventura County. These total combined impacts are presented in Exhibit 4.

In relative terms, the Project's impact on Ventura County is as follows. The Ventura County output impact distributed over 16 years is equivalent to approximately 0.94% of the County's current annual total economic output. The Ventura County payroll impact is equivalent to approximately 1.10% of the County's current annual payroll. The dollar amount of these impacts will be distributed over the entire 16-year term of the build-out. Those proportionate impacts will not occur in a single year.

While estimating the economic impact with this approach it was also possible to estimate a fiscal impact not yet covered. State and local tax revenues from the *indirect* impacts were also estimated. A portion of that category of taxes from the *direct* impacts is already being measured in main portion of this Study. It was estimated that the state and local taxes paid by businesses as a result of the indirect impacts is approximately \$405 million. It was also estimated that approximately 93% of those taxes will be generated in Los Angeles County and 7% in Ventura County.

POTENTIAL ON-GOING VENTURA COUNTY IMPACT

There will also be ongoing economic impacts. The creation of more than 24,000 new jobs at locations at least as close to east Ventura County as they are to many parts of Los Angeles County will create at least a minor positive impact for Ventura County residents seeking the types of jobs created, e.g. largely in the service industries. Notably, there may be a significant positive economic impact in the portion of eastern Ventura County nearest to the Project.

This impact would be expected both because of the proximity of the western portions of the Project to the Ventura County line and the convenience that businesses in that portion of Ventura County could offer to residents of the Project.

This same proximity could, under certain circumstances, create additional retail sales in eastern Ventura County. Currently there is little other than local serving retail in the communities of Santa Paula and Fillmore in eastern Ventura County. This situation could change in which event pure proximity could create a situation in which residents of those portions of the project closest to the County line would find it more convenient to shop in Ventura than in Los Angeles County.

Neither of these factors is likely to be significant in the near or even in the medium term, but as urbanization in both counties continues, the interchange of employment and shopping will increase and probably somewhat to the benefit of Ventura County.

ASSUMPTIONS AND GENERAL LIMITING CONDITIONS

ADK&A/CBRE has made extensive efforts to confirm the accuracy and timeliness of the information contained in this study. Such information was compiled from a variety of sources, including interviews with government officials, review of County documents, and other third parties deemed to be reliable. Although ADK&A/CBRE believes all information in this study is correct, it does not warrant the accuracy of such information and assumes no responsibility for inaccuracies in the information by third parties. We have no responsibility to update this report for events and circumstances occurring after the date of this report. Further, no guarantee is made as to the possible effect on development of present or future federal, state or local legislation, including any regarding environmental or ecological matters.

The accompanying projections and analyses are based on estimates and assumptions developed in connection with the study. In turn, these assumptions, and their relation to the projections, were developed using currently available economic data and other relevant information. It is the nature of forecasting, however, that some assumptions may not materialize, and unanticipated events and circumstances may occur. Therefore, actual results achieved during the projection period will likely vary from the projections, and some of the variations may be material to the conclusions of the analysis.

This report may not be used for any purpose other than that for which it is prepared. Neither all nor any part of the contents of this study shall be disseminated to the public through publication advertising media, public relations, news media, sales media, or any other public means of communication without prior written consent and approval of ADK&A/CBRE.

APPENDIX

A-1.0

Summary of Revenue & Expenditure Drivers, by Development Phase & by Community

Retail Category	2009	2013	2017	2021	2025
TOTAL NEWHALL RANCH PROJECT					
Absorption					
Residential Units	528	9,478	21,036	26,908	27,893
Commercial Space - SF	-	436,298	7,053,314	7,543,477	7,653,477
Project Area Population					
Resident Population	1,636	24,745	56,459	71,682	74,256
Employees	-	1,232	21,280	23,241	23,681
Assessed Value (In Mn \$'s)	300.5	5,021.9	13,200.3	16,358.9	16,867.6
Retail Expenditure (In Mn \$'s) ^{/1}	4.8	81.9	196.9	250.0	259.1
ENTRADA					
Absorption					
Residential Units	-	602	2,762	3,535	3,535
Commercial Space - SF	-	-	2,584,443	2,877,776	2,987,776
Project Area Population					
Resident Population	-	1,553	6,905	8,744	8,744
Employees	-	-	7,437	8,611	9,051
Assessed Value (In Mn \$'s)	-	312.8	2,230.5	2,614.3	2,646.5
Retail Expenditure (In Mn \$'s) ^{/1}	-	5.3	27.8	34.7	35.0
HOMESTEAD					
Absorption					
Residential Units	-	2,175	5,456	5,675	5,675
Commercial Space - SF	-	-	1,250,000	1,250,000	1,250,000
Project Area Population					
Resident Population	-	5,798	14,221	14,777	14,777
Employees	-	-	2,779	2,779	2,779
Assessed Value (In Mn \$'s)	-	1,339.1	3,445.9	3,547.4	3,547.4
Retail Expenditure (In Mn \$'s) ^{/1}	-	20.0	52.6	54.6	54.6
POTRERO					
Absorption					
Residential Units	-	-	2,644	7,443	8,428
Commercial Space - SF	-	-	1,257,000	1,257,000	1,257,000
Project Area Population					
Resident Population	-	-	8,137	20,749	23,322
Employees	-	-	4,085	4,085	4,085
Assessed Value (In Mn \$'s)	-	-	1,956.9	4,537.9	5,014.3
Retail Expenditure (In Mn \$'s) ^{/1}	-	-	26.4	69.5	78.4
MISSION VILLAGE					
Absorption					
Residential Units	72	4,819	5,331	5,331	5,331
Commercial Space - SF	-	247,900	1,102,170	1,299,000	1,299,000
Project Area Population					
Resident Population	190	11,852	12,993	12,993	12,993
Employees	-	620	3,936	4,724	4,724
Assessed Value (In Mn \$'s)	34.3	2,384.5	2,934.3	3,002.7	3,002.7
Retail Expenditure (In Mn \$'s) ^{/1}	0.6	40.3	46.9	47.4	47.4
LEGACY					
Absorption					
Residential Units	-	438	3,399	3,480	3,480
Commercial Space - SF	-	-	486,000	486,000	486,000
Project Area Population					
Resident Population	-	1,267	9,928	10,144	10,144
Employees	-	-	1,689	1,689	1,689
Assessed Value (In Mn \$'s)	-	227.5	1,818.0	1,842.1	1,842.1
Retail Expenditure (In Mn \$'s) ^{/1}	-	3.8	30.2	30.8	30.8
LANDMARK					
Absorption					
Residential Units	456	1,444	1,444	1,444	1,444
Commercial Space - SF	-	188,398	373,701	373,701	373,701
Project Area Population					
Resident Population	1,446	4,275	4,275	4,275	4,275
Employees	-	612	1,354	1,354	1,354
Assessed Value (In Mn \$'s)	266.1	758.0	814.6	814.6	814.6
Retail Expenditure (In Mn \$'s) ^{/1}	4.2	12.5	13.0	13.0	13.0
COMMERCE CENTER					
Absorption					
Residential Units	-	-	-	-	-
Commercial Space - SF	-	2,880,002	3,200,002	3,200,002	3,200,002
Project Area Population					
Resident Population	-	-	-	-	-
Employees	-	7,974	8,870	8,870	8,870
Assessed Value (In Mn \$'s)	-	853.9	938.1	938.1	938.1
Retail Expenditure (In Mn \$'s) ^{/1}	-	5.2	5.8	5.8	5.8

A-2.0
Summary of Retail Sales, Expenditure & Taxes at Built-Out, by Community

Retail Category	Community -->	Entrada	Homestead	Potrero	Mission Village	Legacy	Landmark	Commerce Center	Project Total
Resident & Employee Expenditure (\$ Mn's)									
Total Retail Expenditure		128.31	192.91	277.13	169.33	109.78	46.70	26.61	950.76
Taxable Retail Expenditure		112.61	169.98	243.57	148.66	96.28	41.00	23.30	835.39
Taxable Expenditure in Uninc. Area									
Taxable Expenditure in Project Area		27.76	29.33	42.42	28.47	16.89	7.89	13.98	166.73
Taxable Expenditure outside Project Area		35.00	54.55	78.35	47.39	30.82	12.97	5.82	264.92
Total		62.76	83.88	120.78	75.86	47.71	20.86	19.80	431.65
New Retail Space Sales (\$ Mn's)		260.00	4.95	106.85	50.38	27.20	14.13	54.13	517.63
Project Generated Sales Tax (\$ 000's)									
From New Retail Space in Project		2.60	0.05	1.07	0.50	0.27	0.14	0.54	5.18
In Uninc. Area outside Project		0.35	0.55	0.78	0.47	0.31	0.13	0.06	2.65
Total		2.95	0.60	1.85	0.98	0.58	0.27	0.60	7.83

A-3.1

County Annual Revenues' & Expenditures' Schedule – by Community: ENTRADA

ENTRADA	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
COSTS & REVENUES' INPUTS ¹¹																	
Absorption - Units	-	-	-	88	602	1,177	1,764	2,380	2,762	3,089	3,329	3,473	3,535	3,535	3,535	3,535	3,535
Absorption - SF	-	-	-	-	-	437,125	845,775	1,864,846	2,598,680	2,672,013	2,745,346	2,818,680	2,892,013	2,965,346	3,002,013	3,002,013	3,002,013
Population	-	-	-	222	1,553	3,035	4,506	5,995	6,905	7,683	8,254	8,597	8,744	8,744	8,744	8,744	8,744
Employees	-	-	-	-	-	278	521	4,094	7,285	7,579	7,872	8,165	8,459	8,752	8,899	8,899	8,899
Assessed Value (In Mn \$'s)	-	-	-	51.1	312.8	639.7	916.5	1,655.1	2,230.5	2,375.1	2,490.0	2,567.0	2,614.3	2,636.6	2,646.5	2,646.5	2,646.5
Residents' Retail Expenditure (Mn \$'s)	-	-	-	2.89	18.48	36.43	53.70	81.78	101.98	111.91	119.49	124.38	126.99	127.87	128.31	128.31	128.31
New Retailers' Sales (Mn \$'s)	-	-	-	-	-	18.9	35.4	147.7	260.0	260.0	260.0	260.0	260.0	260.0	260.0	260.0	260.0
Total Property Tax (Mn \$'s)	-	-	-	0.5	3.1	6.4	9.2	16.6	22.3	23.8	24.9	25.7	26.1	26.4	26.5	26.5	26.5
REVENUES (IN \$ 000's)																	
Taxes																	
General Levy																	
Adj. County Unrestricted	-	-	-	79	484	989	1,417	2,559	3,449	3,673	3,850	3,969	4,043	4,077	4,092	4,092	4,092
Library	-	-	-	13	77	157	225	406	547	583	611	630	641	647	649	649	649
Fire	-	-	-	93	569	1,164	1,668	3,012	4,059	4,322	4,531	4,671	4,757	4,798	4,815	4,815	4,815
Total General Levy	-	-	-	184	1,130	2,310	3,310	5,977	8,055	8,577	8,992	9,270	9,441	9,522	9,557	9,557	9,557
Special Taxes																	
Library	-	-	-	2	15	30	45	61	71	79	86	89	91	91	91	91	91
Fire	-	-	-	4	30	76	117	183	226	240	251	259	265	268	270	270	270
Total Special Taxes	-	-	-	7	46	107	162	245	297	319	336	348	356	359	361	361	361
Retail Sales Tax																	
Project Area Retailers	-	-	-	-	-	189	354	1,477	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600
Other Retailers	-	-	-	8	53	105	154	227	278	306	327	340	347	349	350	350	350
Total Sales Tax	-	-	-	8	53	294	508	1,704	2,878	2,906	2,927	2,940	2,947	2,949	2,950	2,950	2,950
Utility User Tax																	
Residential Units	-	-	-	10	65	127	191	257	298	334	360	375	382	382	382	382	382
Commercial Uses	-	-	-	-	-	61	117	347	530	548	565	583	600	618	627	627	627
Total Utility User Taxes	-	-	-	10	65	188	308	604	828	881	925	958	982	1,000	1,008	1,008	1,008
Transient Occupancy	-	-	-	-	-	-	-	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232
Documentary Transfer	-	-	-	29	152	265	254	383	342	179	170	156	142	130	123	117	117
Franchise Fee	-	-	-	2	11	21	32	42	48	54	58	60	61	61	61	61	61
Total Revenues	-	-	-	240	1,456	3,186	4,574	10,186	13,681	14,148	14,640	14,964	15,161	15,252	15,293	15,286	15,286
EXPENDITURES (IN \$ 000's)																	
Sheriff	-	-	-	39	276	540	801	1,066	1,227	1,366	1,467	1,528	1,554	1,554	1,554	1,554	1,554
Fire	-	-	-	75	359	525	1,120	1,289	1,643	1,646	1,660	1,662	1,644	1,610	1,592	1,586	1,586
Library	-	-	-	22	108	156	184	207	210	210	212	363	359	351	347	346	346
Public Works	-	-	-	19	37	56	56	56	56	56	56	56	56	56	56	56	56
Animal care	-	-	-	2	11	22	33	44	50	56	60	63	64	64	64	64	64
Parks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreation	-	-	-	2	11	21	32	42	48	54	58	60	61	61	61	61	61
Planning	-	-	-	2	15	29	43	57	66	74	79	82	84	84	84	84	84
General Admin	-	-	-	16	82	135	227	276	330	346	359	381	382	378	376	375	375
Total Expenditures	-	-	-	177	899	1,483	2,494	3,037	3,630	3,807	3,951	4,196	4,203	4,157	4,134	4,126	4,126
NET SURPLUS (IN \$ 000's)	-	-	-	63	557	1,702	2,080	7,150	10,050	10,341	10,688	10,768	10,958	11,095	11,158	11,160	11,160

Note: All Dollar Amounts are in Un-Inflated 2006 Dollars.

A-3.2

County Annual Revenues' & Expenditures' Schedule – by Community: HOMESTEAD

HOMESTEAD	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
COSTS & REVENUES' INPUTS ¹																	
Absorption - Units	-	150	847	1,442	2,175	3,268	4,302	5,035	5,456	5,672	5,675	5,675	5,675	5,675	5,675	5,675	5,675
Absorption - SF	-	-	-	-	-	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Population	-	390	2,172	3,764	5,798	8,614	11,304	13,158	14,221	14,770	14,777	14,777	14,777	14,777	14,777	14,777	14,777
Employees	-	-	-	-	-	2,779	2,779	2,779	2,779	2,779	2,779	2,779	2,779	2,779	2,779	2,779	2,779
Assessed Value (In Mn \$'s)	-	72.2	423.6	771.3	1,339.1	2,140.2	2,792.4	3,247.9	3,445.9	3,547.4	3,547.4	3,547.4	3,547.4	3,547.4	3,547.4	3,547.4	3,547.4
Residents' Retail Expenditure (Mn \$'s)	-	4.52	25.44	43.92	69.79	113.29	147.98	173.08	186.19	192.82	192.91	192.91	192.91	192.91	192.91	192.91	192.91
New Retailers' Sales (Mn \$'s)	-	-	-	-	-	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Total Property Tax (Mn \$'s)	-	0.7	4.2	7.7	13.4	21.4	27.9	32.5	34.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
REVENUES (IN \$ 000's)																	
Taxes																	
General Levy																	
Adj. County Unrestricted	-	91	535	975	1,693	2,705	3,530	4,105	4,356	4,484	4,484	4,484	4,484	4,484	4,484	4,484	4,484
Library	-	20	117	213	370	591	772	898	952	980	980	980	980	980	980	980	980
Fire	-	137	806	1,467	2,547	4,070	5,310	6,176	6,553	6,746	6,746	6,746	6,746	6,746	6,746	6,746	6,746
Total General Levy	-	249	1,458	2,655	4,609	7,367	9,612	11,179	11,861	12,210	12,210	12,210	12,210	12,210	12,210	12,210	12,210
Special Taxes																	
Library	-	4	22	37	56	84	111	130	140	146	146	146	146	146	146	146	146
Fire	-	7	42	72	109	207	258	295	316	327	327	327	327	327	327	327	327
Total Special Taxes	-	11	64	109	165	291	369	424	456	472	473	473	473	473	473	473	473
Sales Tax																	
Project Area Retailers	-	-	-	-	-	50	50	50	50	50	50	50	50	50	50	50	50
Other Retailers	-	13	72	125	200	318	417	489	526	545	546	546	546	546	546	546	546
Total Sales Tax	-	13	72	125	200	367	467	539	576	595	595	595	595	595	595	595	595
Utility User Tax																	
Residential Units	-	16	91	156	235	353	465	544	589	613	613	613	613	613	613	613	613
Commercial Uses	-	-	-	-	-	233	233	233	233	233	233	233	233	233	233	233	233
Total Utility User Taxes	-	16	91	156	235	586	698	777	823	846	846	846	846	846	846	846	846
Transient Occupancy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Documentary Transfer	-	40	201	221	366	531	491	422	303	254	200	200	200	200	200	200	200
Franchise Fee	-	3	15	26	41	60	79	92	100	103	103	103	103	103	103	103	103
Total Revenues	-	332	1,902	3,291	5,615	9,202	11,716	13,434	14,118	14,481	14,428	14,427	14,427	14,427	14,427	14,427	14,427
EXPENDITURES (IN \$ 000's)																	
Sheriff	-	69	386	669	1,031	1,531	2,009	2,339	2,528	2,626	2,627	2,627	2,627	2,627	2,627	2,627	2,627
Fire	-	214	667	1,232	1,299	1,458	2,732	2,727	3,245	3,022	2,830	2,716	2,639	2,584	2,556	2,546	2,546
Library	-	107	342	372	402	443	461	455	432	404	380	625	606	593	587	585	585
Public Works	-	127	253	294	336	390	431	472	481	481	481	481	481	481	481	481	481
Animal care	-	3	16	27	42	63	82	96	104	108	108	108	108	108	108	108	108
Parks	-	49	49	98	147	147	196	196	196	196	196	196	196	196	196	196	196
Recreation	-	3	15	26	41	60	79	92	100	103	103	103	103	103	103	103	103
Planning	-	4	21	36	56	82	108	126	136	141	141	141	141	141	141	141	141
General Admin	-	58	175	276	335	417	610	650	722	708	687	700	690	683	680	679	679
Total Expenditures	-	633	1,924	3,031	3,687	4,591	6,708	7,154	7,943	7,789	7,552	7,697	7,591	7,517	7,479	7,466	7,466
NET SURPLUS (IN \$ 000's)	-	(301)	(22)	260	1,928	4,611	5,008	6,280	6,175	6,692	6,876	6,731	6,836	6,910	6,948	6,962	6,962

Note: All Dollar Amounts are in Un-Inflated 2006 Dollars.

A-3.3

County Annual Revenues' & Expenditures' Schedule – by Community: POTRERO

POTRERO	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
COSTS & REVENUES' INPUTS ¹																	
Absorption - Units	-	-	-	-	-	12	332	1,232	2,644	4,470	5,835	6,739	7,443	8,013	8,317	8,428	8,428
Absorption - SF	-	-	-	-	-	-	-	628,500	1,257,000	1,257,000	1,257,000	1,257,000	1,257,000	1,257,000	1,257,000	1,257,000	1,257,000
Population	-	-	-	-	-	38	1,052	3,898	8,137	12,764	16,218	18,770	20,749	22,303	23,054	23,322	23,322
Employees	-	-	-	-	-	-	-	2,043	4,085	4,085	4,085	4,085	4,085	4,085	4,085	4,085	4,085
Assessed Value (In Mn \$'s)	-	-	-	-	-	5.5	171.6	916.7	1,956.9	2,941.2	3,679.3	4,170.1	4,537.9	4,813.8	4,955.9	5,014.3	5,014.3
Residents' Retail Expenditure (Mn \$'s)	-	-	-	-	-	0.35	10.12	44.21	94.93	152.27	195.40	223.88	246.02	263.93	273.43	277.13	277.13
New Retailers' Sales (Mn \$'s)	-	-	-	-	-	-	-	53.4	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8
Total Property Tax (Mn \$'s)	-	-	-	-	-	0.1	1.7	9.2	19.6	29.4	36.8	41.7	45.4	48.1	49.6	50.1	50.1
REVENUES (IN \$ 000's)																	
Taxes																	
General Levy																	
Adj. County Unrestricted	-	-	-	-	-	7	208	1,112	2,373	3,567	4,462	5,058	5,504	5,838	6,011	6,082	6,082
Library	-	-	-	-	-	2	47	253	539	811	1,014	1,149	1,251	1,327	1,366	1,382	1,382
Fire	-	-	-	-	-	11	328	1,750	3,735	5,614	7,023	7,960	8,662	9,188	9,459	9,571	9,571
Total General Levy	-	-	-	-	-	19	583	3,114	6,648	9,992	12,499	14,167	15,416	16,354	16,836	17,035	17,035
Special Taxes																	
Library	-	-	-	-	-	0	9	32	68	115	150	173	191	206	214	217	217
Fire	-	-	-	-	-	1	17	87	182	261	321	366	401	430	445	450	450
Total Special Taxes	-	-	-	-	-	1	25	119	251	376	471	539	593	636	659	667	667
Sales Tax																	
Project Area Retailers	-	-	-	-	-	-	-	534	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068
Other Retailers	-	-	-	-	-	1	29	123	264	427	550	632	695	746	773	784	784
Net Sales Tax	-	-	-	-	-	1	29	657	1,332	1,496	1,619	1,700	1,764	1,814	1,841	1,852	1,852
Utility User Tax																	
Residential Units	-	-	-	-	-	1	36	133	286	483	630	728	804	865	898	910	910
Commercial Uses	-	-	-	-	-	-	-	137	273	273	273	273	273	273	273	273	273
Total Utility User Taxes	-	-	-	-	-	1	36	270	559	756	904	1,001	1,077	1,139	1,172	1,184	1,184
Transient Occupancy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Docmentary Transfer	-	-	-	-	-	3	93	418	623	656	581	484	441	412	349	306	274
Franchise Fee	-	-	-	-	-	0	7	27	57	89	114	131	145	156	161	163	163
Total Revenues	-	-	-	-	-	25	773	4,605	9,470	13,365	16,188	18,023	19,436	20,511	21,018	21,207	21,174
EXPENDITURES (IN \$ 000's)																	
Sheriff	-	-	-	-	-	7	187	693	1,447	2,269	2,883	3,337	3,688	3,965	4,098	4,146	4,146
Fire	-	-	-	-	-	5	211	667	1,573	2,382	2,910	3,226	3,461	3,649	3,746	3,781	3,781
Library	-	-	-	-	-	2	43	135	247	349	417	793	851	895	916	923	923
Public Works	-	-	-	-	-	33	66	99	192	289	322	355	384	384	384	384	384
Animal care	-	-	-	-	-	0	8	28	59	93	118	137	151	163	168	170	170
Parks	-	-	-	-	-	49	49	1,431	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480
Recreation	-	-	-	-	-	0	7	27	57	89	114	131	145	156	161	163	163
Planning	-	-	-	-	-	0	10	37	78	122	155	180	199	214	221	223	223
General Admin	-	-	-	-	-	10	58	312	513	707	840	964	1,036	1,090	1,117	1,127	1,127
Total Expenditures	-	-	-	-	-	107	639	3,430	5,645	7,780	9,238	10,602	11,395	11,995	12,291	12,397	12,397
NET SURPLUS (IN \$ 000's)	-	-	-	-	-	(81)	134	1,176	3,824	5,585	6,950	7,421	8,041	8,516	8,727	8,810	8,777

Note: All Dollar Amounts are in Un-Inflated 2006 Dollars.

A-3.4

County Annual Revenues' & Expenditures' Schedule – by Community: MISSION VILLAGE

MISSION VILLAGE	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
COSTS & REVENUES' INPUTS ¹																	
Absorption - Units	72	780	1,775	3,601	4,819	5,199	5,275	5,331	5,331	5,331	5,331	5,331	5,331	5,331	5,331	5,331	5,331
Absorption - SF	-	-	-	113,650	247,900	511,680	708,510	905,340	1,102,170	1,299,000	1,299,000	1,299,000	1,299,000	1,299,000	1,299,000	1,299,000	1,299,000
Population	190	1,979	4,435	8,920	11,852	12,729	12,881	12,993	12,993	12,993	12,993	12,993	12,993	12,993	12,993	12,993	12,993
Employees	-	-	-	284	620	1,574	2,362	3,149	3,936	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724
Assessed Value (In Mn \$'s)	34.3	384.0	984.0	1,821.7	2,384.5	2,663.1	2,768.5	2,865.2	2,934.3	3,002.7	3,002.7	3,002.7	3,002.7	3,002.7	3,002.7	3,002.7	3,002.7
Residents' Retail Expenditure (Mn \$'s)	2.14	23.22	55.18	106.55	141.69	155.90	160.56	164.60	166.96	169.33	169.33	169.33	169.33	169.33	169.33	169.33	169.33
New Retailers' Sales (Mn \$'s)	-	-	-	18.2	39.7	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4
Total Property Tax (Mn \$'s)	0.3	3.8	9.8	18.2	23.8	26.6	27.7	28.7	29.3	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
REVENUES (IN \$ 000's)																	
Taxes																	
General Levy																	
Adj. County Unrestricted	45	504	1,290	2,389	3,127	3,492	3,631	3,757	3,848	3,938	3,938	3,938	3,938	3,938	3,938	3,938	3,938
Library	9	103	264	489	640	715	743	769	788	806	806	806	806	806	806	806	806
Fire	65	725	1,856	3,437	4,498	5,024	5,223	5,405	5,536	5,665	5,665	5,665	5,665	5,665	5,665	5,665	5,665
Total General Levy	119	1,331	3,411	6,315	8,265	9,231	9,597	9,931	10,171	10,408	10,408	10,408	10,408	10,408	10,408	10,408	10,408
Special Taxes																	
Library	2	20	46	93	124	134	136	137	137	137	137	137	137	137	137	137	137
Fire	4	32	81	151	206	236	248	259	267	275	275	275	275	275	275	275	275
Total Special Taxes	5	52	127	244	330	370	384	396	404	412	412	412	412	412	412	412	412
Sales Tax																	
Project Area Retailers	-	-	-	182	397	504	504	504	504	504	504	504	504	504	504	504	504
Other Retailers	6	66	159	304	403	442	454	464	469	474	474	474	474	474	474	474	474
Net Sales Tax	6	66	159	486	800	946	957	967	973	978	978	978	978	978	978	978	978
Utility User Tax																	
Residential Units	8	84	192	389	520	561	570	576	576	576	576	576	576	576	576	576	576
Commercial Uses	-	-	-	22	49	111	160	208	257	306	306	306	306	306	306	306	306
Total Utility User Taxes	8	84	192	411	569	672	729	784	833	882	882	882	882	882	882	882	882
Transient Occupancy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Documentary Transfer	19	196	357	521	413	285	202	200	188	190	154	154	154	154	154	154	154
Franchise Fee	1	14	31	62	83	89	90	91	91	91	91	91	91	91	91	91	91
Total Revenues	159	1,743	4,277	8,039	10,460	11,593	11,959	12,370	12,660	12,961	12,925	12,925	12,925	12,925	12,925	12,925	12,925
EXPENDITURES (IN \$ 000's)																	
Sheriff	34	352	788	1,586	2,107	2,263	2,290	2,310	2,310	2,310	2,310	2,310	2,310	2,310	2,310	2,310	2,310
Fire	-	1,111	1,397	3,077	2,878	2,319	3,349	2,887	3,171	2,840	2,658	2,552	2,479	2,428	2,401	2,392	2,392
Library	-	544	699	882	821	654	525	449	395	356	334	549	533	522	516	514	514
Public Works	77	178	199	199	215	215	215	215	215	215	215	215	215	215	215	215	215
Animal care	1	14	32	65	86	93	94	95	95	95	95	95	95	95	95	95	95
Parks	49	49	250	299	348	348	348	348	348	348	348	348	348	348	348	348	348
Recreation	1	14	31	62	83	89	90	91	91	91	91	91	91	91	91	91	91
Planning	2	19	42	85	113	122	123	124	124	124	124	124	124	124	124	124	124
General Admin	16	228	344	626	665	610	703	652	675	638	618	628	620	613	610	609	609
Total Expenditures	180	2,510	3,783	6,882	7,317	6,713	7,738	7,172	7,424	7,017	6,793	6,913	6,815	6,746	6,711	6,698	6,698
NET SURPLUS (IN \$ 000's)	(22)	(767)	494	1,157	3,143	4,879	4,221	5,198	5,236	5,944	6,131	6,012	6,110	6,179	6,214	6,227	6,227

Note: All Dollar Amounts are in Un-Inflated 2006 Dollars.

A-3.5

County Annual Revenues' & Expenditures' Schedule – by Community: LEGACY

LEGACY	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
COSTS & REVENUES' INPUTS ¹¹																	
Absorption - Units	-	-	-	48	438	1,589	2,716	3,141	3,399	3,480	3,480	3,480	3,480	3,480	3,480	3,480	3,480
Absorption - SF	-	-	-	-	-	328,000	486,000	486,000	486,000	486,000	486,000	486,000	486,000	486,000	486,000	486,000	486,000
Population	-	-	-	152	1,267	4,673	8,046	9,240	9,928	10,144	10,144	10,144	10,144	10,144	10,144	10,144	10,144
Employees	-	-	-	-	-	1,057	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689
Assessed Value (In Mn \$'s)	-	-	-	26.3	227.5	918.3	1,537.6	1,726.7	1,818.0	1,842.1	1,842.1	1,842.1	1,842.1	1,842.1	1,842.1	1,842.1	1,842.1
Residents' Retail Expenditure (Mn \$'s)	-	-	-	1.50	13.44	50.97	87.35	100.15	107.46	109.78	109.78	109.78	109.78	109.78	109.78	109.78	109.78
New Retailers' Sales (Mn \$'s)	-	-	-	-	-	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2
Total Property Tax (Mn \$'s)	-	-	-	0.3	2.3	9.2	15.4	17.3	18.2	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
REVENUES (IN \$ 000's)																	
Taxes																	
General Levy																	
Adj. County Unrestricted	-	-	-	35	299	1,205	2,017	2,266	2,385	2,417	2,417	2,417	2,417	2,417	2,417	2,417	2,417
Library	-	-	-	8	67	272	455	511	538	545	545	545	545	545	545	545	545
Fire	-	-	-	53	462	1,866	3,124	3,508	3,694	3,743	3,743	3,743	3,743	3,743	3,743	3,743	3,743
Total General Levy	-	-	-	96	828	3,342	5,596	6,284	6,617	6,704	6,704	6,704	6,704	6,704	6,704	6,704	6,704
Special Taxes																	
Library	-	-	-	1	11	41	70	81	87	90	90	90	90	90	90	90	90
Fire	-	-	-	2	21	85	139	154	161	162	162	162	162	162	162	162	162
Total Special Taxes	-	-	-	4	32	126	209	235	248	252	252	252	252	252	252	252	252
Sales Tax																	
Project Area Retailers	-	-	-	-	-	272	272	272	272	272	272	272	272	272	272	272	272
Other Retailers	-	-	-	4	38	144	246	282	302	308	308	308	308	308	308	308	308
Net Sales Tax	-	-	-	4	38	416	518	554	574	580	580	580	580	580	580	580	580
Utility User Tax																	
Residential Units	-	-	-	5	47	172	293	339	367	376	376	376	376	376	376	376	376
Commercial Uses	-	-	-	-	-	72	111	111	111	111	111	111	111	111	111	111	111
Total Utility User Taxes	-	-	-	5	47	244	404	450	478	486	486	486	486	486	486	486	486
Transient Occupancy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Documentary Transfer	-	-	-	15	114	395	394	189	144	112	98	98	98	98	98	98	98
Franchise Fee	-	-	-	1	9	33	56	65	69	71	71	71	71	71	71	71	71
Total Revenues	-	-	-	125	1,068	4,555	7,178	7,777	8,130	8,205	8,192	8,192	8,192	8,192	8,192	8,192	8,192
EXPENDITURES (IN \$ 000's)																	
Sheriff	-	-	-	27	225	831	1,430	1,642	1,765	1,803	1,803	1,803	1,803	1,803	1,803	1,803	1,803
Fire	-	-	-	41	262	709	1,724	1,701	2,022	1,854	1,735	1,666	1,618	1,585	1,567	1,561	1,561
Library	-	-	-	15	88	240	328	320	301	278	261	429	416	407	403	402	402
Public Works	-	-	72	188	230	273	273	273	273	273	273	273	273	273	273	273	273
Animal care	-	-	-	1	9	34	59	67	72	74	74	74	74	74	74	74	74
Parks	-	-	-	200	200	200	200	200	200	200	200	200	200	200	200	200	200
Recreation	-	-	-	1	9	33	56	65	69	71	71	71	71	71	71	71	71
Planning	-	-	-	1	12	45	77	88	95	97	97	97	97	97	97	97	97
General Admin	-	-	7	47	104	236	415	436	480	465	451	461	455	451	449	448	448
Total Expenditures	-	-	80	522	1,139	2,600	4,562	4,792	5,278	5,115	4,966	5,074	5,008	4,961	4,938	4,929	4,929
NET SURPLUS (IN \$ 000's)	-	-	(80)	(397)	(71)	1,955	2,615	2,985	2,852	3,091	3,226	3,118	3,184	3,231	3,255	3,263	3,263

Note: All Dollar Amounts are in Un-Inflated 2006 Dollars.

A-3.6

County Annual Revenues' & Expenditures' Schedule – by Community: LANDMARK

LANDMARK	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
COSTS & REVENUES' INPUTS ¹																	
Absorption - Units	456	1,316	1,444	1,444	1,444	1,444	1,444	1,444	1,444	1,444	1,444	1,444	1,444	1,444	1,444	1,444	1,444
Absorption - SF	-	188,398	188,398	188,398	188,398	188,398	373,701	373,701	373,701	373,701	373,701	373,701	373,701	373,701	373,701	373,701	373,701
Population	1,446	3,870	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275
Employees	-	612	612	612	612	612	1,354	1,354	1,354	1,354	1,354	1,354	1,354	1,354	1,354	1,354	1,354
Assessed Value (In Mn \$'s)	266.1	680.2	758.0	758.0	758.0	758.0	814.6	814.6	814.6	814.6	814.6	814.6	814.6	814.6	814.6	814.6	814.6
Residents' Retail Expenditure (Mn \$'s)	14.40	40.25	44.47	44.47	44.47	44.47	46.70	46.70	46.70	46.70	46.70	46.70	46.70	46.70	46.70	46.70	46.70
New Retailers' Sales (Mn \$'s)	-	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1
Total Property Tax (Mn \$'s)	2.7	6.8	7.6	7.6	7.6	7.6	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
REVENUES (IN \$ 000's)																	
Taxes																	
General Levy																	
Adj. County Unrestricted	440	1,124	1,252	1,252	1,252	1,252	1,346	1,346	1,346	1,346	1,346	1,346	1,346	1,346	1,346	1,346	1,346
Library	60	154	171	171	171	171	184	184	184	184	184	184	184	184	184	184	184
Fire	472	1,206	1,343	1,343	1,343	1,343	1,444	1,444	1,444	1,444	1,444	1,444	1,444	1,444	1,444	1,444	1,444
Total General Levy	972	2,483	2,767	2,767	2,767	2,767	2,974	2,974	2,974	2,974	2,974	2,974	2,974	2,974	2,974	2,974	2,974
Special Taxes																	
Library	12	34	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
Fire	23	54	61	61	61	61	68	68	68	68	68	68	68	68	68	68	68
Total Special Taxes	34	88	98	98	98	98	105	105	105	105	105	105	105	105	105	105	105
Sales Tax																	
Project Area Retailers	-	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141
Other Retailers	42	113	125	125	125	125	130	130	130	130	130	130	130	130	130	130	130
Net Sales Tax	42	254	266	266	266	266	271	271	271	271	271	271	271	271	271	271	271
Utility User Tax																	
Residential Units	49	142	156	156	156	156	156	156	156	156	156	156	156	156	156	156	156
Commercial Uses	-	42	42	42	42	42	88	88	88	88	88	88	88	88	88	88	88
Total Utility User Taxes	49	184	198	198	198	198	244	244	244	244	244	244	244	244	244	244	244
Transient Occupancy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Docmentary Transfer	146	238	78	40	40	40	64	41	41	41	41	41	41	41	41	41	41
Franchise Fee	10	27	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Total Revenues	1,253	3,274	3,437	3,398	3,398	3,398	3,688	3,665	3,665	3,665	3,665	3,665	3,665	3,665	3,665	3,665	3,665
EXPENDITURES (IN \$ 000's)																	
Sheriff	257	688	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760
Fire	-	1,875	1,136	1,234	862	644	917	782	859	769	720	691	672	658	650	648	648
Library	-	1,063	673	423	296	220	174	148	130	117	110	181	175	172	170	169	169
Public Works	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
Animal care	11	28	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Parks	-	68	264	264	264	264	264	264	264	264	264	264	264	264	264	264	264
Recreation	10	27	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Planning	14	37	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
General Admin	46	395	310	295	245	215	238	222	228	218	212	216	214	212	211	211	211
Total Expenditures	502	4,346	3,410	3,242	2,694	2,370	2,620	2,442	2,507	2,395	2,332	2,379	2,351	2,332	2,322	2,318	2,318
NET SURPLUS (IN \$ 000's)	752	(1,072)	27	156	704	1,029	1,068	1,222	1,158	1,270	1,332	1,286	1,314	1,333	1,343	1,346	1,346

Note: All Dollar Amounts are in Un-Inflated 2006 Dollars.

A-3.7
County Annual Revenues' & Expenditures' Schedule – by Community: COMMERCE CENTER

COMMERCE CENTER	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
COSTS & REVENUES' INPUTS ¹																	
Absorption - Units	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Absorption - SF	-	228,572	982,858	1,737,144	2,880,002	3,200,002	3,200,002	3,200,002	3,200,002	3,200,002	3,200,002	3,200,002	3,200,002	3,200,002	3,200,002	3,200,002	3,200,002
Population	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Employees	-	640	2,791	4,774	7,974	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870
Assessed Value (In Mn \$'s)	-	61.2	307.7	549.1	853.9	938.1	938.1	938.1	938.1	938.1	938.1	938.1	938.1	938.1	938.1	938.1	938.1
Residents' Retail Expenditure (Mn \$'s)	-	0.4	1.8	3.1	5.2	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
New Retailers' Sales (Mn \$'s)	-	-	25.9	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1
Total Property Tax (Mn \$'s)	-	0.6	3.1	5.5	8.5	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
REVENUES (IN \$ 000's)																	
<u>Taxes</u>																	
General Levy																	
Adj. County Unrestricted	-	85.8	431.2	769.6	1,196.8	1,314.7	1,314.7	1,314.7	1,314.7	1,314.7	1,314.7	1,314.7	1,314.7	1,314.7	1,314.7	1,314.7	1,314.7
Library	-	16.0	80.5	143.6	223.4	245.4	245.4	245.4	245.4	245.4	245.4	245.4	245.4	245.4	245.4	245.4	245.4
Fire	-	114.8	576.8	1,029.5	1,600.9	1,758.7	1,758.7	1,758.7	1,758.7	1,758.7	1,758.7	1,758.7	1,758.7	1,758.7	1,758.7	1,758.7	1,758.7
Total General Levy	-	217	1,088	1,943	3,021	3,319	3,319	3,319	3,319	3,319	3,319	3,319	3,319	3,319	3,319	3,319	3,319
Special Taxes																	
Library	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire	-	9.4	40.3	71.2	118.1	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2
Total Special Taxes	-	9	40	71	118	131	131	131	131	131	131	131	131	131	131	131	131
Retail Sales Tax																	
Project Area Retailers	-	-	259	541	541	541	541	541	541	541	541	541	541	541	541	541	541
Other Retailers	-	4	18	31	52	58	58	58	58	58	58	58	58	58	58	58	58
Total Sales Tax	-	4	277	573	594	600	600	600	600	600	600	600	600	600	600	600	600
Utility User Tax																	
Residential Units	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Uses	-	47	202	351	584	650	650	650	650	650	650	650	650	650	650	650	650
Total Utility User Taxes	-	47	202	351	584	650	650	650	650	650	650	650	650	650	650	650	650
Transient Occupancy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Documentary Transfer	-	33	133	137	178	69	25	25	25	25	25	25	25	25	25	25	25
Franchise Fee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenues	-	309	1,741	3,075	4,495	4,768	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724
EXPENDITURES (IN \$ 000's)																	
Sheriff	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Library	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Public Works	-	-	-	60	60	102	102	102	102	102	102	102	102	102	102	102	102
Animal care	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Planning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General Admin	-	-	-	6	6	10	10	10	10	10	10	10	10	10	10	10	10
Total Expenditures	-	-	-	66	66	113	113	113	113	113	113	113	113	113	113	113	113
NET SURPLUS (IN \$ 000's)	-	309	1,741	3,009	4,429	4,655	4,612	4,612	4,612	4,612	4,612	4,612	4,612	4,612	4,612	4,612	4,612

Note: All Dollar Amounts are in Un-Inflated 2006 Dollars.

A-4.0
County Annual Revenue and Expenditure Inputs: by Consolidated Product – ALL PROJECT
(All Dollar amounts in un-inflated 2006 dollars)

Use - Product	By 2025	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION ^{/1}																		
Residential for Sale	24,242	528	1,097	1,820	1,947	2,559	2,868	2,802	2,442	2,160	1,945	1,317	1,006	766	570	304	111	-
Category 1 - SFD	7,851	240	273	227	136	412	654	920	954	1,092	1,022	678	473	368	266	96	40	-
Category 2 - SFD-C	1,653	240	258	81	144	144	39	59	114	144	116	72	72	72	72	26	-	-
Category 3 - SFD-E	1,927	-	56	180	253	311	252	238	122	84	144	132	91	48	16	-	-	-
Category 4 - SFA-F	5,271	24	176	455	668	940	859	713	648	371	208	75	72	62	-	-	-	-
Category 5 - SFA-T	3,503	24	240	402	333	462	794	642	356	181	69	-	-	-	-	-	-	-
Category 6 - SFA-M	1,512	-	30	283	221	144	150	154	186	144	98	72	30	-	-	-	-	-
Category 7 - SNR	2,525	-	64	192	192	146	120	76	62	144	288	288	268	216	216	182	71	-
Apartment Uses	3,651	-	621	-	610	296	343	342	288	313	505	291	42	-	-	-	-	-
Commercial - Retail	3,065,152	-	94,199	143,751	270,615	134,250	375,763	97,075	974,750	974,750	-	-	-	-	-	-	-	-
Commercial - Office	4,673,597	-	185,628	285,378	197,846	457,144	615,330	540,133	895,988	895,988	270,163	73,333	73,333	73,333	73,333	36,667	-	-
Commercial - Other	170,024	-	-	-	-	-	-	-	170,024	-	-	-	-	-	-	-	-	-
Industrial R&D	2,944,706	-	137,143	325,159	399,476	685,715	1,282,000	-	115,214	-	-	-	-	-	-	-	-	-
POPULATION ^{/1}																		
Residential for Sale	66,318	1,636	4,686	9,330	14,255	20,928	28,713	36,573	43,367	49,552	55,101	58,822	61,617	63,744	65,298	66,049	66,318	66,318
Category 1 - SFD	24,888	761	1,626	2,346	2,777	4,083	6,156	9,073	12,097	15,558	18,798	20,947	22,447	23,613	24,457	24,761	24,888	24,888
Category 2 - SFD-C	5,119	761	1,579	1,835	2,235	2,635	2,751	2,938	3,300	3,756	4,124	4,352	4,580	4,808	5,037	5,119	5,119	5,119
Category 3 - SFD-E	6,109	-	178	748	1,550	2,536	3,335	4,089	4,476	4,742	5,199	5,617	5,906	6,058	6,109	6,109	6,109	6,109
Category 4 - SFA-F	12,545	57	476	1,559	3,149	5,386	7,430	9,127	10,670	11,553	12,048	12,226	12,397	12,545	12,545	12,545	12,545	12,545
Category 5 - SFA-T	9,009	57	628	1,585	2,378	3,487	5,642	7,429	8,341	8,829	9,009	9,009	9,009	9,009	9,009	9,009	9,009	9,009
Category 6 - SFA-M	3,599	-	71	745	1,271	1,614	1,971	2,337	2,780	3,123	3,356	3,527	3,599	3,599	3,599	3,599	3,599	3,599
Category 7 - SNR	5,050	-	128	512	896	1,188	1,428	1,580	1,704	1,992	2,568	3,144	3,680	4,112	4,544	4,908	5,050	5,050
Apartment Uses	7,939	-	1,553	1,553	3,078	3,818	4,652	5,491	6,194	6,907	7,528	7,839	7,939	7,939	7,939	7,939	7,939	7,939
EMPLOYEES ^{/1}																		
Commercial - Retail	7,663	-	235	595	1,271	1,607	2,546	2,789	5,226	7,663	7,663	7,663	7,663	7,663	7,663	7,663	7,663	7,663
Commercial - Office	18,694	-	743	1,884	2,675	4,504	6,965	9,126	12,710	16,294	17,374	17,668	17,961	18,254	18,548	18,694	18,694	18,694
Commercial - Other	152	-	-	-	-	-	-	-	152	152	152	152	152	152	152	152	152	152
Industrial R&D	5,889	-	274	925	1,724	3,095	5,659	5,659	5,889	5,889	5,889	5,889	5,889	5,889	5,889	5,889	5,889	5,889
ASSESSED VALUE ^{/1}																		
(in Million \$'s)	17,806	300	1,198	2,473	3,977	5,876	8,063	9,939	12,164	14,138	15,461	16,314	16,882	17,297	17,595	17,747	17,806	17,806
Residential for Sale	13,380	300	918	1,947	3,023	4,489	6,069	7,637	8,964	10,102	11,212	11,974	12,511	12,904	13,180	13,322	13,380	13,380
Category 1 - SFD	4,296	165	343	470	543	785	1,166	1,669	2,170	2,751	3,294	3,652	3,904	4,094	4,224	4,272	4,296	4,296
Category 2 - SFD-C	833	114	233	267	338	406	420	454	522	606	671	709	746	784	821	833	833	833
Category 3 - SFD-E	2,351	-	67	290	563	932	1,243	1,570	1,760	1,851	2,051	2,218	2,300	2,341	2,351	2,351	2,351	2,351
Category 4 - SFA-F	2,413	12	105	331	637	1,070	1,463	1,785	2,073	2,240	2,330	2,359	2,388	2,413	2,413	2,413	2,413	2,413
Category 5 - SFA-T	1,568	10	121	307	457	666	1,019	1,300	1,459	1,538	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568
Category 6 - SFA-M	715	-	13	139	239	305	373	440	531	604	656	697	715	715	715	715	715	715
Category 7 - SNR	1,204	-	36	142	247	323	385	419	449	512	642	770	889	989	1,087	1,169	1,204	1,204
Apartment Uses	867	-	155	155	285	353	437	523	594	671	792	859	867	867	867	867	867	867
Commercial - Retail	1,370	-	35	115	258	317	491	534	957	1,370	1,370	1,370	1,370	1,370	1,370	1,370	1,370	1,370
Commercial - Office	1,646	-	59	154	220	372	576	755	1,106	1,452	1,545	1,568	1,591	1,614	1,636	1,646	1,646	1,646
Commercial - Other	40	-	-	-	-	-	-	-	40	40	40	40	40	40	40	40	40	40
Industrial R&D	502	-	31	103	192	345	490	490	502	502	502	502	502	502	502	502	502	502
RETAIL EXPENDITURE ^{/1 /2}																		
(in Million \$'s)	264.9	4.8	19.6	37.4	59.8	87.2	119.2	148.8	177.2	202.7	224.8	239.3	248.8	255.8	261.1	263.9	264.9	264.9
Residential for Sale	220.0	4.8	14.7	31.1	48.5	71.8	97.6	123.2	145.5	164.9	183.0	195.3	204.3	211.1	216.2	218.9	220.0	220.0
Category 1 - SFD	71.9	2.3	4.9	7.0	8.2	12.0	18.1	26.5	35.1	44.9	54.2	60.5	64.8	68.1	70.6	71.5	71.9	71.9
Category 2 - SFD-C	14.7	2.0	4.2	4.9	6.2	7.4	7.8	8.3	9.4	10.8	11.8	12.5	13.2	13.8	14.5	14.7	14.7	14.7
Category 3 - SFD-E	24.9	-	0.7	3.0	5.8	9.7	13.0	16.4	18.5	19.5	21.6	23.3	24.3	24.8	24.9	24.9	24.9	24.9
Category 4 - SFA-F	44.6	0.2	1.8	5.8	11.4	19.3	26.5	32.5	37.9	41.1	42.8	43.5	44.0	44.6	44.6	44.6	44.6	44.6
Category 5 - SFA-T	29.4	0.2	2.2	5.6	8.4	12.3	19.0	24.3	27.3	28.8	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4
Category 6 - SFA-M	12.9	-	0.2	2.5	4.3	5.6	6.8	8.1	9.8	11.0	11.9	12.6	12.9	12.9	12.9	12.9	12.9	12.9
Category 7 - SNR	21.6	-	0.6	2.3	4.1	5.4	6.5	7.1	7.6	8.8	11.2	13.6	15.8	17.6	19.4	20.9	21.6	21.6
Apartment Uses	23.7	-	4.1	4.1	7.6	9.4	11.6	14.0	15.9	18.1	21.5	23.4	23.7	23.7	23.7	23.7	23.7	23.7
Commercial - Retail	5.0	-	0.2	0.4	0.8	1.1	1.7	1.8	3.4	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Commercial - Office	12.3	-	0.5	1.2	1.8	3.0	4.6	6.0	8.3	10.7	11.4	11.6	11.8	12.0	12.2	12.3	12.3	12.3
Commercial - Other	0.1	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Industrial R&D	3.9	-	0.2	0.6	1.1	2.0	3.7	3.7	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9

^{/1} Derived by combining data from individual community outputs - Refer Appendix A-4.1 through A-4.6

^{/2} The portion of Project Area residents & employees' retail expenditure (excluding Auto Sales), which is spent in Unincorporated area outside the Project Area.

A-4.1

County Annual Revenue and Expenditure Inputs: by Consolidated Product – Community: ENTRADA

(All Dollar amounts in un-inflated 2006 dollars)

Use - Product	By 2025	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION ¹																		
Residential for Sale	2,827	-	-	-	88	514	569	455	472	238	183	144	102	62	-	-	-	-
Category 1 - SFD	419	-	-	-	16	136	144	93	30	-	-	-	-	-	-	-	-	-
Category 2 - SFD-C	153	-	-	-	72	72	9	-	-	-	-	-	-	-	-	-	-	-
Category 4 - SFA-F	1,151	-	-	-	-	120	144	186	240	144	111	72	72	62	-	-	-	-
Category 5 - SFA-T	780	-	-	-	-	186	272	170	130	22	-	-	-	-	-	-	-	-
Category 6 - SFA-M	324	-	-	-	-	-	6	72	72	72	72	72	30	-	-	-	-	-
Apartment A-F	708	-	-	-	-	-	132	144	144	144	144	96	42	-	-	-	-	-
Commercial - Retail	1,529,388	-	-	-	-	-	111,313	97,075	660,500	660,500	-	-	-	-	-	-	-	-
Commercial - Office	1,173,150	-	-	-	-	-	-	-	384,908	384,908	73,333	73,333	73,333	73,333	73,333	36,667	-	-
Commercial - Other	170,024	-	-	-	-	-	-	-	170,024	-	-	-	-	-	-	-	-	-
Industrial R&D	115,214	-	-	-	-	-	-	-	115,214	-	-	-	-	-	-	-	-	-
POPULATION ¹	8,744	-	-	-	222	1,553	3,035	4,506	5,995	6,905	7,683	8,254	8,597	8,744	8,744	8,744	8,744	8,744
Residential for Sale	7,059	-	-	-	222	1,553	3,021	4,177	5,324	5,891	6,326	6,669	6,912	7,059	7,059	7,059	7,059	7,059
Category 1 - SFD	1,328	-	-	-	51	482	938	1,233	1,328	1,328	1,328	1,328	1,328	1,328	1,328	1,328	1,328	1,328
Category 2 - SFD-C	364	-	-	-	171	343	364	364	364	364	364	364	364	364	364	364	364	364
Category 4 - SFA-F	2,739	-	-	-	-	286	628	1,071	1,642	1,985	2,249	2,420	2,592	2,739	2,739	2,739	2,739	2,739
Category 5 - SFA-T	1,856	-	-	-	-	443	1,090	1,495	1,804	1,856	1,856	1,856	1,856	1,856	1,856	1,856	1,856	1,856
Category 6 - SFA-M	771	-	-	-	-	-	-	14	186	357	528	700	771	771	771	771	771	771
Apartment A-F	1,685	-	-	-	-	-	14	328	671	1,014	1,357	1,585	1,685	1,685	1,685	1,685	1,685	1,685
EMPLOYEES ¹	9,051	-	-	-	-	-	278	521	4,247	7,437	7,731	8,024	8,317	8,611	8,904	9,051	9,051	9,051
Commercial - Retail	3,823	-	-	-	-	-	278	521	2,172	3,823	3,823	3,823	3,823	3,823	3,823	3,823	3,823	3,823
Commercial - Office	4,693	-	-	-	-	-	-	-	1,540	3,079	3,373	3,666	3,959	4,253	4,546	4,693	4,693	4,693
Commercial - Other	152	-	-	-	-	-	-	-	152	152	152	152	152	152	152	152	152	152
Industrial R&D	230	-	-	-	-	-	-	-	230	230	230	230	230	230	230	230	230	230
ASSESSED VALUE ¹ (in Million \$'s)	2,646	-	-	-	51	313	640	917	1,655	2,231	2,375	2,490	2,567	2,614	2,637	2,646	2,646	2,646
Residential for Sale	1,338	-	-	-	51	313	584	786	997	1,108	1,196	1,267	1,313	1,338	1,338	1,338	1,338	1,338
Category 1 - SFD	248	-	-	-	11	97	184	235	248	248	248	248	248	248	248	248	248	248
Category 2 - SFD-C	82	-	-	-	41	80	82	82	82	82	82	82	82	82	82	82	82	82
Category 4 - SFA-F	472	-	-	-	-	49	107	182	281	343	390	419	448	472	472	472	472	472
Category 5 - SFA-T	348	-	-	-	-	88	211	284	340	348	348	348	348	348	348	348	348	348
Category 6 - SFA-M	188	-	-	-	-	-	-	3	45	87	129	171	188	188	188	188	188	188
Apartment A-F	162	-	-	-	-	-	1	33	67	101	134	154	162	162	162	162	162	162
Commercial - Retail	703	-	-	-	-	-	54	98	405	703	703	703	703	703	703	703	703	703
Commercial - Office	390	-	-	-	-	-	-	-	134	266	289	313	336	358	381	390	390	390
Commercial - Other	40	-	-	-	-	-	-	-	40	40	40	40	40	40	40	40	40	40
Industrial R&D	12	-	-	-	-	-	-	-	12	12	12	12	12	12	12	12	12	12
RETAIL EXPENDITURE ^{1,2} (in Million \$'s)	35.0	-	-	-	0.8	5.3	10.5	15.4	22.7	27.8	30.6	32.7	34.0	34.7	34.9	35.0	35.0	35.0
Residential for Sale	24.5	-	-	-	0.8	5.3	10.3	14.1	18.2	20.2	21.8	23.1	24.0	24.5	24.5	24.5	24.5	24.5
Category 1 - SFD	3.9	-	-	-	0.2	1.4	2.7	3.6	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Category 2 - SFD-C	1.4	-	-	-	0.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Category 4 - SFA-F	9.5	-	-	-	-	1.0	2.1	3.7	5.6	6.8	7.8	8.4	9.0	9.5	9.5	9.5	9.5	9.5
Category 5 - SFA-T	6.6	-	-	-	-	1.6	3.9	5.4	6.5	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
Category 6 - SFA-M	3.1	-	-	-	-	-	-	0.1	0.7	1.4	2.1	2.8	3.1	3.1	3.1	3.1	3.1	3.1
Apartment A-F	4.7	-	-	-	-	-	0.0	0.9	1.3	2.8	3.8	4.4	4.7	4.7	4.7	4.7	4.7	4.7
Commercial - Retail	2.5	-	-	-	-	-	0.2	0.3	1.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Commercial - Office	3.1	-	-	-	-	-	-	-	1.0	2.0	2.2	2.4	2.6	2.8	3.0	3.1	3.1	3.1
Commercial - Other	0.1	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Industrial R&D	0.2	-	-	-	-	-	-	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

¹ Derived by combining data from individual product level community outputs - Refer Appendix A-6.1

² The portion of Project Area residents & employees' retail expenditure (excluding Auto Sales), which is spent in Unincorporated area outside the Project Area.

A-4.2

County Annual Revenue and Expenditure Inputs: by Consolidated Product –Community: HOMESTEAD

(All Dollar amounts in un-inflated 2006 dollars)

Use - Product	By 2025	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION ¹																		
Residential for Sale	5,488	-	150	697	595	733	906	1,034	733	421	216	3	-	-	-	-	-	-
Category 1 - SFD	376	-	42	108	72	56	29	69	-	-	-	-	-	-	-	-	-	-
Category 2 - SFD-C	253	-	-	-	-	-	6	59	72	72	44	-	-	-	-	-	-	-
Category 3 - SFD-E	979	-	-	48	150	311	236	162	67	5	-	-	-	-	-	-	-	-
Category 4 - SFA-F	1,878	-	54	186	80	144	341	452	336	185	97	3	-	-	-	-	-	-
Category 5 - SFA-T	814	-	24	72	72	78	144	144	144	87	49	-	-	-	-	-	-	-
Category 6 - SFA-M	1,188	-	30	283	221	144	150	148	114	72	26	-	-	-	-	-	-	-
Apartment Uses	187	-	-	-	-	-	187	-	-	-	-	-	-	-	-	-	-	-
Commercial - Retail	27,500	-	-	-	-	-	27,500	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	132,500	-	-	-	-	-	132,500	-	-	-	-	-	-	-	-	-	-	-
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	1,090,000	-	-	-	-	-	1,090,000	-	-	-	-	-	-	-	-	-	-	-
POPULATION ¹																		
Residential for Sale	14,777	-	390	2,172	3,764	5,798	8,614	11,304	13,158	14,221	14,770	14,777	14,777	14,777	14,777	14,777	14,777	14,777
Category 1 - SFD	14,332	-	390	2,172	3,764	5,798	8,169	10,859	12,713	13,776	14,325	14,332	14,332	14,332	14,332	14,332	14,332	14,332
Category 2 - SFD-C	1,192	-	133	476	704	881	973	1,192	1,192	1,192	1,192	1,192	1,192	1,192	1,192	1,192	1,192	1,192
Category 3 - SFD-E	802	-	-	-	-	-	19	206	434	663	802	802	802	802	802	802	802	802
Category 4 - SFA-F	3,103	-	-	152	628	1,614	2,362	2,875	3,088	3,103	3,103	3,103	3,103	3,103	3,103	3,103	3,103	3,103
Category 5 - SFA-T	4,470	-	129	571	762	1,104	1,916	2,992	3,791	4,232	4,463	4,470	4,470	4,470	4,470	4,470	4,470	4,470
Category 6 - SFA-M	1,937	-	57	228	400	585	928	1,614	1,821	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937
Apartment Uses	2,827	-	71	745	1,271	1,614	1,971	2,323	2,594	2,766	2,827	2,827	2,827	2,827	2,827	2,827	2,827	2,827
Apartment Uses	445	-	-	-	-	-	445	445	445	445	445	445	445	445	445	445	445	445
EMPLOYEES ¹																		
Commercial - Retail	2,779	-	-	-	-	-	2,779	2,779	2,779	2,779	2,779	2,779	2,779	2,779	2,779	2,779	2,779	2,779
Commercial - Office	69	-	-	-	-	-	69	69	69	69	69	69	69	69	69	69	69	69
Commercial - Other	530	-	-	-	-	-	530	530	530	530	530	530	530	530	530	530	530	530
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	2,180	-	-	-	-	-	2,180	2,180	2,180	2,180	2,180	2,180	2,180	2,180	2,180	2,180	2,180	2,180
ASSESSED VALUE ¹																		
(in Million \$'s)	3,547	-	72	424	771	1,339	2,140	2,792	3,248	3,446	3,547	3,547	3,547	3,547	3,547	3,547	3,547	3,547
Residential for Sale	3,348	-	72	424	771	1,339	1,941	2,593	3,048	3,246	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348
Category 1 - SFD	187	-	21	75	110	138	153	187	187	187	187	187	187	187	187	187	187	187
Category 2 - SFD-C	153	-	-	-	-	-	3	37	82	127	153	153	153	153	153	153	153	153
Category 3 - SFD-E	1,234	-	-	45	186	556	847	1,092	1,234	1,234	1,234	1,234	1,234	1,234	1,234	1,234	1,234	1,234
Category 4 - SFA-F	875	-	27	120	157	225	384	594	748	832	875	875	875	875	875	875	875	875
Category 5 - SFA-T	372	-	11	45	79	115	181	246	311	350	372	372	372	372	372	372	372	372
Category 6 - SFA-M	527	-	13	139	239	305	373	437	486	517	527	527	527	527	527	527	527	527
Apartment Uses	45	-	-	-	-	-	45	45	45	45	45	45	45	45	45	45	45	45
Commercial - Retail	12	-	-	-	-	-	12	12	12	12	12	12	12	12	12	12	12	12
Commercial - Office	39	-	-	-	-	-	39	39	39	39	39	39	39	39	39	39	39	39
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	104	-	-	-	-	-	104	104	104	104	104	104	104	104	104	104	104	104
RETAIL EXPENDITURE ^{1/2}																		
(in Million \$'s)	54.6	-	1.3	7.2	12.5	20.0	31.8	41.7	48.9	52.6	54.5	54.6	54.6	54.6	54.6	54.6	54.6	54.6
Residential for Sale	51.5	-	1.3	7.2	12.5	20.0	28.7	38.7	45.9	49.6	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
Category 1 - SFD	3.2	-	0.4	1.3	1.9	2.4	2.7	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Category 2 - SFD-C	2.4	-	-	-	-	-	0.0	0.6	1.3	2.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Category 3 - SFD-E	13.2	-	-	0.5	2.0	5.9	9.0	11.5	13.0	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
Category 4 - SFA-F	16.0	-	0.5	2.1	2.8	4.1	6.9	10.8	13.6	15.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Category 5 - SFA-T	6.8	-	0.2	0.8	1.4	2.1	3.3	4.5	5.7	6.4	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Category 6 - SFA-M	9.8	-	0.2	2.5	4.3	5.6	6.8	8.1	9.0	9.6	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
Apartment Uses	1.2	-	-	-	-	-	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Commercial - Retail	0.0	-	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial - Office	0.3	-	-	-	-	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	1.4	-	-	-	-	-	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4

^{1/1} Derived by combining data from individual product level community outputs - Refer Appendix A-6.2

^{1/2} The portion of Project Area residents & employees' retail expenditure (excluding Auto Sales), which is spent in Unincorporated area outside the Project Area.

A-4.3
County Annual Revenue and Expenditure Inputs: by Consolidated Product – Community: POTRERO
(All Dollar amounts in un-inflated 2006 dollars)

Use - Product	By 2025	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION ¹																		
Residential for Sale	7,908	-	-	-	-	-	12	320	900	1,387	1,526	1,170	904	704	570	304	111	-
Category 1 - SFD	5,143	-	-	-	-	-	12	292	804	1,092	1,022	678	473	368	266	96	40	-
Category 2 - SFD-C	500	-	-	-	-	-	-	-	42	72	72	72	72	72	72	26	-	-
Category 3 - SFD-E	586	-	-	-	-	-	-	28	48	79	144	132	91	48	16	-	-	-
Category 7 - SNR	1,679	-	-	-	-	-	-	-	6	144	288	288	268	216	216	182	71	-
Apartment Uses	520	-	-	-	-	-	-	-	-	25	300	195	-	-	-	-	-	-
Commercial - Retail	628,500	-	-	-	-	-	-	-	314,250	314,250	-	-	-	-	-	-	-	-
Commercial - Office	628,500	-	-	-	-	-	-	-	314,250	314,250	-	-	-	-	-	-	-	-
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
POPULATION ¹																		
Residential for Sale	23,322	-	-	-	-	-	38	1,052	3,898	8,137	12,764	16,218	18,770	20,749	22,303	23,054	23,322	23,322
Category 1 - SFD	23,104	-	-	-	-	-	38	1,052	3,898	8,127	12,627	15,999	18,551	20,530	22,084	22,835	23,104	23,104
Category 2 - SFD-C	16,303	-	-	-	-	-	38	964	3,512	6,974	10,214	12,363	13,862	15,029	15,872	16,177	16,303	16,303
Category 3 - SFD-E	1,585	-	-	-	-	-	-	-	133	361	590	818	1,046	1,274	1,503	1,585	1,585	1,585
Category 7 - SNR	1,858	-	-	-	-	-	-	89	241	491	948	1,366	1,655	1,807	1,858	1,858	1,858	1,858
Category 7 - SNR	3,358	-	-	-	-	-	-	-	12	300	876	1,452	1,988	2,420	2,852	3,216	3,358	3,358
Apartment Uses	218	-	-	-	-	-	-	-	-	11	137	218	218	218	218	218	218	218
EMPLOYEES ¹																		
Commercial - Retail	4,085	-	-	-	-	-	-	-	2,043	4,085	4,085	4,085	4,085	4,085	4,085	4,085	4,085	4,085
Commercial - Office	1,571	-	-	-	-	-	-	-	786	1,571	1,571	1,571	1,571	1,571	1,571	1,571	1,571	1,571
Commercial - Office	2,514	-	-	-	-	-	-	-	1,257	2,514	2,514	2,514	2,514	2,514	2,514	2,514	2,514	2,514
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ASSESSED VALUE ¹ (in Million \$'s)																		
Residential for Sale	5,014	-	-	-	-	-	6	172	917	1,957	2,941	3,679	4,170	4,538	4,814	4,956	5,014	5,014
Category 1 - SFD	4,366	-	-	-	-	-	6	172	654	1,428	2,339	3,031	3,522	3,890	4,166	4,308	4,366	4,366
Category 2 - SFD-C	2,690	-	-	-	-	-	6	148	565	1,145	1,689	2,046	2,298	2,489	2,619	2,667	2,690	2,690
Category 3 - SFD-E	262	-	-	-	-	-	-	-	23	61	100	138	175	213	250	262	262	262
Category 7 - SNR	656	-	-	-	-	-	-	24	64	155	355	523	605	645	656	656	656	656
Category 7 - SNR	758	-	-	-	-	-	-	-	3	66	196	324	443	543	641	723	758	758
Apartment Uses	125	-	-	-	-	-	-	-	-	6	79	125	125	125	125	125	125	125
Commercial - Retail	230	-	-	-	-	-	-	-	116	230	230	230	230	230	230	230	230	230
Commercial - Office	293	-	-	-	-	-	-	-	147	293	293	293	293	293	293	293	293	293
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RETAIL EXPENDITURE ^{1/2} (in Million \$'s)																		
Residential for Sale	78.4	-	-	-	-	-	0.1	2.9	12.3	26.4	42.7	55.0	63.2	69.5	74.6	77.3	78.4	78.4
Category 1 - SFD	72.2	-	-	-	-	-	0.1	2.9	10.9	23.5	37.9	48.9	57.1	63.4	68.5	71.2	72.2	72.2
Category 2 - SFD-C	46.7	-	-	-	-	-	0.1	2.6	9.8	19.6	29.0	35.2	39.5	42.9	45.3	46.3	46.7	46.7
Category 3 - SFD-E	4.6	-	-	-	-	-	-	-	0.4	1.0	1.7	2.4	3.0	3.7	4.3	4.6	4.6	4.6
Category 7 - SNR	7.0	-	-	-	-	-	-	0.3	0.7	1.7	3.7	5.4	6.4	6.9	7.0	7.0	7.0	7.0
Category 7 - SNR	14.0	-	-	-	-	-	-	-	0.0	1.2	3.6	6.0	8.2	10.0	11.8	13.3	14.0	14.0
Apartment Uses	3.4	-	-	-	-	-	-	-	-	0.2	2.1	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Commercial - Retail	1.0	-	-	-	-	-	-	-	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Commercial - Office	1.7	-	-	-	-	-	-	-	0.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ Derived by combining data from individual product level community outputs - Refer Appendix A-6.3

^{1/2} The portion of Project Area residents & employees' retail expenditure (excluding Auto Sales), which is spent in Unincorporated area outside the Project Area.

A-4.4
County Annual Revenue and Expenditure Inputs: by Consolidated Product – Community: MISSION VILLAGE
(All Dollar amounts in un-inflated 2006 dollars)

Use - Product	By 2025	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION ^{1/}																		
Residential for Sale	4,285	72	538	995	1,216	952	380	76	56	-	-	-	-	-	-	-	-	-
Category 2 - SFD-C	344	24	80	72	72	72	24	-	-	-	-	-	-	-	-	-	-	-
Category 3 - SFD-E	291	-	56	132	103	-	-	-	-	-	-	-	-	-	-	-	-	-
Category 4 - SFA-F	1,745	24	122	269	588	548	194	-	-	-	-	-	-	-	-	-	-	-
Category 5 - SFA-T	1,059	24	216	330	261	186	42	-	-	-	-	-	-	-	-	-	-	-
Category 7 - SNR	846	-	64	192	192	146	120	76	56	-	-	-	-	-	-	-	-	-
Apartment Uses	1,046	-	170	-	610	266	-	-	-	-	-	-	-	-	-	-	-	-
Commercial - Retail	314,850	-	-	-	113,650	134,250	66,950	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	984,150	-	-	-	-	-	196,830	196,830	196,830	196,830	196,830	-	-	-	-	-	-	-
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
POPULATION ^{1/}	12,993	190	1,979	4,435	8,920	11,852	12,729	12,881	12,993	12,993	12,993	12,993	12,993	12,993	12,993	12,993	12,993	12,993
Residential for Sale	10,378	190	1,554	4,010	6,970	9,237	10,114	10,266	10,378	10,378	10,378	10,378	10,378	10,378	10,378	10,378	10,378	10,378
Category 2 - SFD-C	1,090	76	330	558	786	1,014	1,090	1,090	1,090	1,090	1,090	1,090	1,090	1,090	1,090	1,090	1,090	1,090
Category 3 - SFD-E	922	-	178	596	922	922	922	922	922	922	922	922	922	922	922	922	922	922
Category 4 - SFA-F	4,153	57	347	988	2,387	3,691	4,153	4,153	4,153	4,153	4,153	4,153	4,153	4,153	4,153	4,153	4,153	4,153
Category 5 - SFA-T	2,520	57	571	1,357	1,978	2,420	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520	2,520
Category 7 - SNR	1,692	-	128	512	896	1,188	1,428	1,580	1,692	1,692	1,692	1,692	1,692	1,692	1,692	1,692	1,692	1,692
Apartment Uses	2,615	-	425	425	1,950	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615
EMPLOYEES ^{1/}	4,724	-	-	-	284	620	1,574	2,362	3,149	3,936	4,724	4,724	4,724	4,724	4,724	4,724	4,724	4,724
Commercial - Retail	787	-	-	-	284	620	787	787	787	787	787	787	787	787	787	787	787	787
Commercial - Office	3,937	-	-	-	-	-	787	1,575	2,362	3,149	3,937	3,937	3,937	3,937	3,937	3,937	3,937	3,937
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ASSESSED VALUE ^{1/} (in Million \$'s)	3,003	34	384	984	1,822	2,384	2,663	2,769	2,865	2,934	3,003	3,003	3,003	3,003	3,003	3,003	3,003	3,003
Residential for Sale	2,275	34	340	940	1,592	2,034	2,213	2,248	2,275	2,275	2,275	2,275	2,275	2,275	2,275	2,275	2,275	2,275
Category 2 - SFD-C	149	12	50	80	110	139	149	149	149	149	149	149	149	149	149	149	149	149
Category 3 - SFD-E	376	-	67	245	376	376	376	376	376	376	376	376	376	376	376	376	376	376
Category 4 - SFA-F	827	12	78	211	480	736	827	827	827	827	827	827	827	827	827	827	827	827
Category 5 - SFA-T	477	10	110	262	378	459	477	477	477	477	477	477	477	477	477	477	477	477
Category 7 - SNR	446	-	36	142	247	323	385	419	446	446	446	446	446	446	446	446	446	446
Apartment Uses	235	-	44	44	174	235	235	235	235	235	235	235	235	235	235	235	235	235
Commercial - Retail	143	-	-	-	57	116	143	143	143	143	143	143	143	143	143	143	143	143
Commercial - Office	350	-	-	-	-	-	72	142	212	281	350	350	350	350	350	350	350	350
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RETAIL EXPENDITURE ^{1/2} (in Million \$'s)	47.4	0.6	6.6	15.9	30.4	40.3	44.2	45.4	46.4	46.9	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4
Residential for Sale	38.1	0.6	5.5	14.8	25.6	33.7	37.0	37.6	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
Category 2 - SFD-C	2.9	0.2	0.9	1.5	2.1	2.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Category 3 - SFD-E	3.8	-	0.7	2.5	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Category 4 - SFA-F	14.9	0.2	1.3	3.7	8.6	13.2	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9
Category 5 - SFA-T	8.9	0.2	2.0	4.8	7.0	8.5	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
Category 7 - SNR	7.6	-	0.6	2.3	4.1	5.4	6.5	7.1	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
Apartment Uses	6.2	-	1.1	1.1	4.6	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Commercial - Retail	0.5	-	-	-	0.2	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Commercial - Office	2.6	-	-	-	-	-	0.5	1.0	1.6	2.1	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

^{1/} Derived by combining data from individual product level community outputs - Refer Appendix A-6.4

^{1/2} The portion of Project Area residents & employees' retail expenditure (excluding Auto Sales), which is spent in Unincorporated area outside the Project Area.

A-4.5
County Annual Revenue and Expenditure Inputs: by Consolidated Product – by Community: LEGACY
(All Dollar amounts in un-inflated 2006 dollars)

Use - Product	By 2025	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION ¹																		
Residential for Sale	2,741	-	-	-	48	360	1,001	917	281	114	20	-	-	-	-	-	-	-
Category 1 - SFD	1,323	-	-	-	48	220	469	466	120	-	-	-	-	-	-	-	-	-
Category 3 - SFD-E	71	-	-	-	-	16	48	7	-	-	-	-	-	-	-	-	-	-
Category 4 - SFA-F	497	-	-	-	-	128	180	75	72	42	-	-	-	-	-	-	-	-
Category 5 - SFA-T	850	-	-	-	-	12	336	328	82	72	20	-	-	-	-	-	-	-
Apartment Uses	739	-	-	-	-	30	150	210	144	144	61	-	-	-	-	-	-	-
Commercial - Retail	170,000	-	-	-	-	-	170,000	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	316,000	-	-	-	-	-	158,000	158,000	-	-	-	-	-	-	-	-	-	-
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
POPULATION ¹																		
Residential for Sale	8,296	-	-	-	152	1,192	4,223	7,071	7,905	8,233	8,296	8,296	8,296	8,296	8,296	8,296	8,296	8,296
Category 1 - SFD	4,194	-	-	-	152	850	2,336	3,814	4,194	4,194	4,194	4,194	4,194	4,194	4,194	4,194	4,194	4,194
Category 3 - SFD-E	225	-	-	-	-	51	203	225	225	225	225	225	225	225	225	225	225	225
Category 4 - SFA-F	1,183	-	-	-	-	305	733	912	1,083	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183	1,183
Category 5 - SFA-T	2,695	-	-	-	-	38	1,103	2,143	2,403	2,631	2,695	2,695	2,695	2,695	2,695	2,695	2,695	2,695
Apartment Uses	1,848	-	-	-	-	75	450	975	1,335	1,695	1,848	1,848	1,848	1,848	1,848	1,848	1,848	1,848
EMPLOYEES ¹																		
Commercial - Retail	425	-	-	-	-	-	1,057	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689
Commercial - Office	1,264	-	-	-	-	-	632	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ASSESSED VALUE ¹																		
(in Million \$'s)	1,842	-	-	-	26	228	918	1,538	1,727	1,818	1,842	1,842	1,842	1,842	1,842	1,842	1,842	1,842
Residential for Sale	1,471	-	-	-	26	220	742	1,256	1,408	1,462	1,471	1,471	1,471	1,471	1,471	1,471	1,471	1,471
Category 1 - SFD	775	-	-	-	26	155	428	704	775	775	775	775	775	775	775	775	775	775
Category 3 - SFD-E	85	-	-	-	-	-	20	78	85	85	85	85	85	85	85	85	85	85
Category 4 - SFA-F	238	-	-	-	-	60	145	182	218	238	238	238	238	238	238	238	238	238
Category 5 - SFA-T	372	-	-	-	-	5	150	293	330	364	372	372	372	372	372	372	372	372
Apartment Uses	188	-	-	-	-	7	44	98	135	172	188	188	188	188	188	188	188	188
Commercial - Retail	80	-	-	-	-	-	80	80	80	80	80	80	80	80	80	80	80	80
Commercial - Office	103	-	-	-	-	-	52	103	103	103	103	103	103	103	103	103	103	103
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RETAIL EXPENDITURE ^{1/2}																		
(in Million \$'s)	30.8	-	-	-	0.4	3.8	14.4	24.6	28.2	30.2	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.8
Residential for Sale	24.5	-	-	-	0.4	3.6	12.5	20.8	23.4	24.4	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
Category 1 - SFD	12.4	-	-	-	0.4	2.5	6.8	11.3	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
Category 3 - SFD-E	0.9	-	-	-	-	-	0.2	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Category 4 - SFA-F	4.2	-	-	-	-	1.1	2.6	3.2	3.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Category 5 - SFA-T	7.0	-	-	-	-	0.1	2.9	5.5	6.2	6.9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Apartment Uses	5.2	-	-	-	-	0.2	1.2	2.7	3.7	4.7	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Commercial - Retail	0.3	-	-	-	-	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Commercial - Office	0.8	-	-	-	-	-	0.4	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

^{1/1} Derived by combining data from individual product level community outputs - Refer Appendix A-6.5

^{1/2} The portion of Project Area residents & employees' retail expenditure (excluding Auto Sales), which is spent in Unincorporated area outside the Project Area.

A-4.6

County Annual Revenue and Expenditure Inputs: by Consolidated Product – by Community: LANDMARK

(All Dollar amounts in un-inflated 2006 dollars)

Use - Product	By 2025	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION ¹																		
Residential for Sale	993	456	409	128	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Category 1 - SFD	590	240	231	119	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Category 2 - SFD-C	403	216	178	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apartment Uses	451	-	451	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial - Retail	94,199	-	94,199	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	279,502	-	94,199	-	-	-	-	185,303	-	-	-	-	-	-	-	-	-	-
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
POPULATION ¹	4,275	1,446	3,870	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275
Residential for Sale	3,148	1,446	2,742	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148
Category 1 - SFD	1,870	761	1,493	1,870	1,870	1,870	1,870	1,870	1,870	1,870	1,870	1,870	1,870	1,870	1,870	1,870	1,870	1,870
Category 2 - SFD-C	1,278	685	1,249	1,278	1,278	1,278	1,278	1,278	1,278	1,278	1,278	1,278	1,278	1,278	1,278	1,278	1,278	1,278
Apartment Uses	1,128	-	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128
EMPLOYEES ¹	1,354	-	612	612	612	612	612	1,354	1,354	1,354	1,354	1,354	1,354	1,354	1,354	1,354	1,354	1,354
Commercial - Retail	235	-	235	235	235	235	235	235	235	235	235	235	235	235	235	235	235	235
Commercial - Office	1,118	-	377	377	377	377	377	1,118	1,118	1,118	1,118	1,118	1,118	1,118	1,118	1,118	1,118	1,118
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ASSESSED VALUE ¹ (in Million \$'s)	815	266	680	758	758	758	758	815	815	815	815	815	815	815	815	815	815	815
Residential for Sale	583	266	505	583	583	583	583	583	583	583	583	583	583	583	583	583	583	583
Category 1 - SFD	395	165	322	395	395	395	395	395	395	395	395	395	395	395	395	395	395	395
Category 2 - SFD-C	187	102	183	187	187	187	187	187	187	187	187	187	187	187	187	187	187	187
Apartment Uses	111	-	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
Commercial - Retail	35	-	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Commercial - Office	85	-	29	29	29	29	29	85	85	85	85	85	85	85	85	85	85	85
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RETAIL EXPENDITURE ^{1/2} (in Million \$'s)	13.0	4.2	11.3	12.5	12.5	12.5	12.5	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Residential for Sale	9.1	4.2	7.9	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
Category 1 - SFD	5.7	2.3	4.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Category 2 - SFD-C	3.4	1.8	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Apartment Uses	3.0	-	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Commercial - Retail	0.2	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Commercial - Office	0.7	-	0.2	0.2	0.2	0.2	0.2	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Commercial - Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

^{1/1} Derived by combining data from individual product level community outputs - Refer Appendix A-6.6

^{1/2} The portion of Project Area residents & employees' retail expenditure (excluding Auto Sales), which is spent in Unincorporated area outside the Project Area.

A-4.7

County Annual Revenue and Expenditure Inputs: by Consolidated Product – by Community: COMMERCE CENTER

(All Dollar amounts in un-inflated 2006 dollars)

Use - Product	By 2025	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION ^{/1}	3,200,002	-	228,572	754,287	754,286	1,142,858	320,000	-	-	-	-	-	-	-	-	-	-	-
Commercial - Retail	300,715	-	-	143,751	156,965	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	1,159,795	-	91,429	285,378	197,846	457,144	128,000	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	1,739,492	-	137,143	325,159	399,476	685,715	192,000	-	-	-	-	-	-	-	-	-	-	-
EMPLOYEES ^{/1}	8,870	-	640	2,791	4,774	7,974	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870
Commercial - Retail	752	-	-	359	752	752	752	752	752	752	752	752	752	752	752	752	752	752
Commercial - Office	4,639	-	366	1,507	2,299	4,127	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639
Industrial R&D	3,479	-	274	925	1,724	3,095	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479
ASSESSED VALUE ^{/1}	938	-	61	308	549	854	938	938	938	938	938	938	938	938	938	938	938	938
(in Million \$'s)																		
Commercial - Retail	166	-	-	80	166	166	166	166	166	166	166	166	166	166	166	166	166	166
Commercial - Office	385	-	30	125	191	343	385	385	385	385	385	385	385	385	385	385	385	385
Industrial R&D	387	-	31	103	192	345	387	387	387	387	387	387	387	387	387	387	387	387
RETAIL EXPENDITURE ^{/1,2}	5.8	-	0.4	1.8	3.1	5.2	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
(in Million \$'s)																		
Commercial - Retail	0.5	-	-	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Commercial - Office	3.0	-	0.2	1.0	1.5	2.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Industrial R&D	2.3	-	0.2	0.6	1.1	2.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3

^{/1} Derived by combining data from individual product level community outputs - Refer Appendix A-6.7

^{/2} The portion of Project Area residents & employees' retail expenditure (excluding Auto Sales), which is spent in Unincorporated area outside the Project Area.

A-5.0
Standards & Methodology Assumptions for deriving County Expenditure – ALL PROJECT

FACILITIES MAINTAINANCE EXPENDITURE FINANCED BY COUNTY GENERAL FUND - PARKS

(Not Financed Privately by HOA or by New Special District)

Total (acres)		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 <--	--> 2031
Acres Added	253.8														
Entrada	-														
Homestead	20.0		5.0		5.0	5.0		5.0							
Potrero	151.0						5.0		141.0	5.0					
Mission Village	35.5	5.0		20.5	5.0	5.0									
Legacy	20.4				20.4										
Landmark	26.9		6.9	20.0											
Cumulative Acres															
Entrada		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Homestead		0.0	5.0	5.0	10.0	15.0	15.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Potrero		0.0	0.0	0.0	0.0	0.0	5.0	5.0	146.0	151.0	151.0	151.0	151.0	151.0	151.0
Mission Village		5.0	5.0	25.5	30.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
Legacy		0.0	0.0	0.0	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
Landmark		0.0	6.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9	26.9
Annual Cost	\$/Ac														
Entrada	9,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Homestead	9,800	0	49,000	49,000	98,000	147,000	147,000	196,000	196,000	196,000	196,000	196,000	196,000	196,000	196,000
Potrero	9,800	0	0	0	0	0	49,000	49,000	1,430,800	1,479,800	1,479,800	1,479,800	1,479,800	1,479,800	1,479,800
Mission Village	9,800	49,000	49,000	249,900	298,900	347,900	347,900	347,900	347,900	347,900	347,900	347,900	347,900	347,900	347,900
Legacy	9,800	0	0	0	199,920	199,920	199,920	199,920	199,920	199,920	199,920	199,920	199,920	199,920	199,920
Landmark	9,800	0	67,620	263,620	263,620	263,620	263,620	263,620	263,620	263,620	263,620	263,620	263,620	263,620	263,620

FACILITIES MAINTAINANCE EXPENDITURE FINANCED BY COUNTY GENERAL FUND - ROADS

(Not Financed Privately by HOA or by New Special District)

Cumulative Lane Miles		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 <--	--> 2031
Entrada (5.1 Lane Miles)															
Local	2	0	0	0	2	3	5	5	5	5	5	5	5	5	5
Collector	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Homestead (51.7 Lane Miles)															
Local	2	0	4	8	11	15	19	23	27	27	27	27	27	27	27
Collector	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major	6	0	11	23	23	23	24	24	24	24	24	24	24	24	24
Potrero (40.3 Lane Miles)															
Local	2	0	0	0	0	0	3	6	9	12	15	18	21	24	24
Collector	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major	6	0	0	0	0	0	0	0	0	8	16	16	16	16	16
Mission Village (26.3 Lane Miles)															
Local	2	0	2	4	4	5	5	5	5	5	5	5	5	5	5
Collector	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major	6	10	21	21	21	21	21	21	21	21	21	21	21	21	21
Legacy (31.1 Lane Miles)															
Local	2	0	0	0	4	8	12	12	12	12	12	12	12	12	12
Collector	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major	6	0	0	10	19	19	19	19	19	19	19	19	19	19	19
Landmark (17.4 Lane Miles)															
Local	2	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Collector	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7
VCC (10.1 Lane Miles)															
Collector	4	0.0	0.0	0.0	6.0	6.0	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1

A-5.0Continued

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 <--	--> 2031
Costs on Cum. Lane Miles															
Entrada															
Local	10,900	0	0	0	18,509	37,019	55,528	55,528	55,528	55,528	55,528	55,528	55,528	55,528	55,528
Collector	10,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major	7,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		0	0	0	18,509	37,019	55,528	55,528	55,528	55,528	55,528	55,528	55,528	55,528	55,528
Homestead															
Local	10,900	0	41,288	82,576	123,864	165,152	206,439	247,727	289,015	297,273	297,273	297,273	297,273	297,273	297,273
Collector	10,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major	7,500	0	85,227	170,455	170,455	170,455	183,239	183,239	183,239	183,239	183,239	183,239	183,239	183,239	183,239
Total		0	126,515	253,030	294,318	335,606	389,678	430,966	472,254	480,511	480,511	480,511	480,511	480,511	480,511
Potrero															
Local	10,900	0	0	0	0	0	33,030	66,061	99,091	132,121	165,152	198,182	231,212	260,114	260,114
Collector	10,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major	7,500	0	0	0	0	0	0	0	0	59,659	123,580	123,580	123,580	123,580	123,580
Total		0	0	0	0	0	33,030	66,061	99,091	191,780	288,731	321,761	354,792	383,693	383,693
Mission Village															
Local	10,900	0	20,644	41,288	41,288	57,803	57,803	57,803	57,803	57,803	57,803	57,803	57,803	57,803	57,803
Collector	10,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major	7,500	76,705	157,670	157,670	157,670	157,670	157,670	157,670	157,670	157,670	157,670	157,670	157,670	157,670	157,670
Total		76,705	178,314	198,958	198,958	215,473	215,473	215,473	215,473	215,473	215,473	215,473	215,473	215,473	215,473
Legacy															
Local	10,900	0	0	0	42,712	85,425	128,137	128,137	128,137	128,137	128,137	128,137	128,137	128,137	128,137
Collector	10,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major	7,500	0	0	72,409	144,818	144,818	144,818	144,818	144,818	144,818	144,818	144,818	144,818	144,818	144,818
Total		0	0	72,409	187,530	230,243	272,955	272,955	272,955	272,955	272,955	272,955	272,955	272,955	272,955
Landmark															
Local	10,900	109,413	109,413	109,413	109,413	109,413	109,413	109,413	109,413	109,413	109,413	109,413	109,413	109,413	109,413
Collector	10,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major	7,500	55,398	55,398	55,398	55,398	55,398	55,398	55,398	55,398	55,398	55,398	55,398	55,398	55,398	55,398
TOTAL		164,811	164,811	164,811	164,811	164,811	164,811	164,811	164,811	164,811	164,811	164,811	164,811	164,811	164,811
VCC															
Collector	10,100	0	0	0	60,398	60,398	102,414	102,414	102,414	102,414	102,414	102,414	102,414	102,414	102,414
Total		0	0	0	60,398	60,398	102,414	102,414	102,414	102,414	102,414	102,414	102,414	102,414	102,414

LIBRARY EXPENDITURE

Library Size - SF	60,000		
Costs		phase 1	phase 2
Absorption Start at Built Out %		0%	60%
Absorption Start Year		2010	2020
Cost Categories			
Personnel		984,000	1,480,000
Maintenance		200,000	400,000
Operations		1,500,000	2,723,000
Total		2,684,000	4,603,000
	2,006	2020-31	Ann. Growth
Popln. In Service Area excl. NR	25,000	42,000	3.78%
Share of Built-Out Project Popln to Service Area			63.87%

A-5.0Continued

SHERIFF'S DEPARTMENT'S EXPENDITURE - COST OF DEPUTIES					
	Low	High			
Deputies	74	74			
Annual Cost	13,200,000	13,200,000			
Resident Population	74,256	90.2%			
	Low	High	Average		
Residents Per Deputy					
Resident Population	1,000	1,000	1,000		
Cost Per					
Resident Population	178	178	178		
FIRE DEPARTMENT EXPENDITURE					
Station	1	2	3	4	Total
Type	A	A	B	A	
Start Year (At Built Out %):	0%	25%	50%	75%	100%
Equipment					
Engine	1	1	1	1	4
Quint	0	0	1	0	1
Batt HQ	No	No	Yes	No	
Annual Cost	3,200,000	2,460,000	4,393,000	2,460,000	12,513,000
ANIMAL CARE EXPENDITURE					
Per Capita Expenses	\$ 7.29	(Per 2005-06 County of Los Angeles Budget's Animal Care expenditure per capita as benchmark)			
PLANNING NET EXPENDITURE					
Per Capita Expenses	\$ 9.57	(Per 2005-06 County of Los Angeles Budget's Planning expenditure per capita as benchmark)			
GENERAL ADMINISTRATION EXPENDITURE					
As % of Total Expenditure	10.0%				
RECREATION EXPENDITURE					
Per Capita Expenses	\$ 7.00	(Per 2005-06 County of Los Angeles Budget's Recreation expenditure per capita as benchmark)			

A-6.1

Assumptions for Product Absorption; Population & Employee Estimates; & Assessed Value – by Community: ENTRADA

Community Use	Product	Type	DATA PER NEWHALL LAND					INFERRED DATA		ASSUMPTIONS				
			Acres	Units	Avg. Unit Size - SF	Unit Price	Absorption		Acres per Unit	Absorption Term (Yrs.)	Household Size	Real Home Price Inflation	Turnover Rate	
							Start Date	Units / Mo.						
ENTRADA			355.3											
Residential for Sale			171.9	2,827										
PA5 - SFD			SFD	18.3	132	2,500	662,667	9/1/2012	4.0	0.14	4.0	3.17	0.0%	10.0%
PA6 - SFD			SFD	18.5	121	2,900	739,000	12/1/2012	4.0	0.15	4.0	3.17	0.0%	10.0%
PA7 - SFD			SFD	18.5	166	1,900	548,000	3/1/2013	4.0	0.11	4.0	3.17	0.0%	10.0%
PA4 - SFA			SFD-C	22.0	153	2,088	583,750	9/1/2012	6.0	0.14	3.0	2.38	0.0%	10.0%
PA8 - SFA			SFA-T	12.3	116	1,788	533,667	3/1/2013	6.0	0.11	2.0	2.38	0.0%	10.0%
PA13 - SFA			SFA-T	14.6	176	1,636	497,750	6/1/2013	6.0	0.08	3.0	2.38	0.0%	10.0%
PA12 - SFA			SFA-T	10.4	144	1,400	454,000	6/1/2013	6.0	0.07	3.0	2.38	0.0%	10.0%
PA11 - SFA			SFA-T	13.0	280	1,207	421,000	6/1/2013	6.0	0.05	5.0	2.38	0.0%	10.0%
PA9 - Apt/Condo			SFA-F	11.5	261	1,125	407,000	3/1/2013	6.0	0.04	4.0	2.38	0.0%	10.0%
PA10 - Apt/Condo			SFA-F	6.7	273	1,200	420,000	3/1/2013	6.0	0.02	4.0	2.38	0.0%	10.0%
PA15a - Loft Over Retail			SFA-F	10.9	153	1,350	471,000	6/1/2016	6.0	0.07	3.0	2.38	0.0%	10.0%
PA15b - Condo on Podium			SFA-F	9.9	464	1,066	420,000	6/1/2015	6.0	0.02	7.0	2.38	0.0%	10.0%
PA15c - Townhomes			SFA-T	3.6	64	1,350	491,000	12/1/2015	6.0	0.06	2.0	2.38	0.0%	10.0%
PA15d - Tower Condos			SFA-M	1.7	324	1,400	583,000	12/1/2015	6.0	0.01	6.0	2.38	0.0%	10.0%
Apartment Use			23.0	708										
PA1a - Apt			17.8	408	1,100	1,700	12/1/2014	6.0	0.04	7.0	2.38			
PA15e - Apt			5.2	300	1,100	1,700	3/1/2015	6.0	0.02	5.0	2.38			
Non-Residential Uses			Acres	GLA	FAR	Rent \$/SF/Mo.	Absorption		ASSUMPTIONS					
							Start Date	Term (Mos.)	Cap. Rate	Op. Exps.	SF/Empl.	Real Inflation	Turnover	
Apartment Use														
PA1a - Apt									5.8%	30%		0.0%	10.0%	
PA15e - Apt									5.8%	30%		0.0%	10.0%	
Commercial - Retail			88.5	1,543,625										
PA14			3.0	28,475	0.22	4.00	4/1/2014	6.0	7.1%	10%	400	0.0%	5.0%	
PA3			18.8	194,150	0.24	3.00	4/1/2014	24.0	7.1%	10%	400	0.0%	5.0%	
PA1b			66.7	750,000	0.22	3.00	1/1/2016	24.0	7.1%	10%	400	0.0%	5.0%	
PA15f			0.0	571,000	-	3.00	1/1/2016	24.0	7.1%	10%	400	0.0%	5.0%	
Commercial - Office			55.5	1,173,150										
PA1b - Lots 2-7			16.4	550,000	0.66	2.75	1/1/2016	90.0	7.2%	30%	250	0.0%	5.0%	
PA15g			39.1	623,150	0.22	2.90	4/1/2016	24.0	7.2%	30%	250	0.0%	5.0%	
Commercial - Other			6.7	170,024										
PA1b - Lot 1 Hospitality			4.4	165,000	0.49	-	1/1/2016	-	8.9%	10%	1110	0.0%	5.0%	
PA1b - Lot 24 Service Str.			2.4	5,024	0.05	1.75	1/1/2016	-	8.9%	10%	1430	0.0%	5.0%	
Industrial R&D			9.7	115,214										
PA2			9.7	115,214	-	0.75	1/1/2016	12.0	7.4%	10%	500	0.0%	5.0%	

A-6.2

Assumptions for Product Absorption; Population & Employee Estimates; & Assessed Value – by Community: HOMESTEAD

Community Use	Product	Type	DATA PER NEWHALL LAND						INFERRED DATA		ASSUMPTIONS		
			Acres	Units	Avg. Unit Size - SF	Unit Price	Absorption		Acres per Unit	Absorption Term (Yrs.)	Household Size	Real Home Price Inflation	Turnover Rate
							Start Date	Units / Mo.					
HOMESTEAD			983.5										
Residential for Sale			902.7	5,488									
Chiquito Det. Condos	SFD-C		4.0	23	1,347	458,000	11/30/2014	6.0	0.17	2.0	3.17	0.0%	10.0%
Chiquito Customs	SFD-E		19.0	29	5,000	2,500,000	8/30/2014	3.0	0.66	2.0	3.17	0.0%	10.0%
HS Central SFD	SFD-E		18.0	78	3,800	880,000	5/31/2014	4.0	0.23	3.0	3.17	0.0%	10.0%
HS Central Customs	SFD-E		105.5	86	5,000	2,500,000	5/31/2014	3.0	1.23	3.0	3.17	0.0%	10.0%
HS West HW-2	SFD-C		16.6	230	2,400	637,000	5/31/2015	6.0	0.07	4.0	3.17	0.0%	10.0%
HS West Custom	SFD-E		171.0	62	5,000	2,500,000	5/31/2015	3.0	2.76	3.0	3.17	0.0%	10.0%
HS West Green Court HW-1	SFD		10.0	75	1,650	510,000	11/30/2014	6.0	0.13	2.0	3.17	0.0%	10.0%
Long Canyon SFD 75	SFD-E		30.8	106	4,200	947,000	8/30/2011	4.0	0.29	3.0	3.17	0.0%	10.0%
Long Canyon SFD 80	SFD-E		44.1	115	4,800	1,049,000	8/30/2011	4.0	0.38	4.0	3.17	0.0%	10.0%
Long Canyon SFD 50	SFD-E		8.8	38	4,000	913,000	8/30/2011	4.0	0.23	2.0	3.17	0.0%	10.0%
LCS - 3 SFD5500	SFD-E		28.3	117	4,000	913,000	8/30/2012	4.0	0.24	4.0	3.17	0.0%	10.0%
LCS -4 SFD6500	SFD-E		27.6	127	4,100	925,000	8/30/2012	4.0	0.22	4.0	3.17	0.0%	10.0%
Onion Fields SFD 55	SFD-E		15.0	96	3,800	880,000	5/31/2013	4.0	0.16	3.0	3.17	0.0%	10.0%
Onion Fields SFD 50x90	SFD-E		6.0	37	3,600	846,000	2/28/2013	4.0	0.16	1.0	3.17	0.0%	10.0%
Onion Field SFD 35	SFD		4.8	47	1,750	527,000	8/30/2013	6.0	0.10	2.0	3.17	0.0%	10.0%
Potrero Ridge Customs	SFD-E		106.1	88	5,000	2,500,000	2/28/2013	6.0	1.21	2.0	3.17	0.0%	10.0%
Mesas West 4 SFD Cluster	SFD		14.0	108	1,650	510,000	5/30/2010	6.0	0.13	2.0	3.17	0.0%	10.0%
Mesas West 11 SFD Cluster	SFD		15.7	146	1,650	510,000	5/31/2011	6.0	0.11	3.0	3.17	0.0%	10.0%
HS Central 4 Plex HC-2	SFA-F		11.6	120	1,600	498,000	2/28/2014	6.0	0.10	2.0	2.38	0.0%	10.0%
HS Central 2 Story HC-3	SFA-F		18.5	351	1,440	471,000	2/28/2014	6.0	0.05	6.0	2.38	0.0%	10.0%
HS Central 3 Story HC-4	SFA-F		9.5	144	1,450	473,000	8/30/2014	6.0	0.07	3.0	2.38	0.0%	10.0%
HS Central E1 16 Plex	SFA-M		6.4	120	1,150	422,000	11/30/2014	6.0	0.05	3.0	2.38	0.0%	10.0%
HS West 3-4 Plex	SFA-F		17.0	229	1,345	498,000	2/28/2015	6.0	0.07	4.0	2.38	0.0%	10.0%
HS West Triplex HW-5	SFA-F		4.0	44	1,450	473,000	2/28/2015	6.0	0.09	1.0	2.38	0.0%	10.0%
Long Canyon 3 Story	SFA-F		8.4	326	1,359	458,000	11/30/2012	6.0	0.03	6.0	2.38	0.0%	10.0%
LCS 1 & 2	SFA-F		22.4	161	2,085	500,000	8/30/2012	6.0	0.14	3.0	2.38	0.0%	10.0%
Onion Fields Triplex	SFA-F		21.7	213	1,345	455,000	2/28/2014	6.0	0.10	4.0	2.38	0.0%	10.0%
Onion Fields 3 Story	SFA-T		10.6	237	1,359	458,000	11/30/2013	6.0	0.04	5.0	2.38	0.0%	10.0%
Mesas West 1A 3/4 Plex	SFA-F		7.6	97	1,550	490,000	11/30/2010	6.0	0.08	3.0	2.38	0.0%	10.0%
Mesas West 3A 3/4 Plex	SFA-F		11.0	145	1,550	490,000	5/31/2010	6.0	0.08	3.0	2.38	0.0%	10.0%
Mesas West 1B-10 Plex	SFA-M		7.0	85	1,317	450,000	2/28/2011	6.0	0.08	2.0	2.38	0.0%	10.0%
Mesas West 3B 10 Plex	SFA-M		6.7	85	1,317	450,000	8/30/2010	6.0	0.08	2.0	2.38	0.0%	10.0%
Mesas West 7A 10 Plex	SFA-M		6.0	60	1,317	450,000	11/1/3010	6.0	0.10	2.0	2.38	0.0%	10.0%
Mesas West 12A 10 Plex	SFA-M		6.9	70	1,317	450,000	5/31/2011	6.0	0.10	2.0	2.38	0.0%	10.0%
Mesas West 6 2/3 Duplex	SFA-F		5.0	48	2,050	575,000	11/30/2010	6.0	0.10	2.0	2.38	0.0%	10.0%
Mesas West 7B 10 Plex	SFA-M		7.7	96	1,317	450,000	2/28/2011	6.0	0.08	2.0	2.38	0.0%	10.0%
Mesas West 8B 2 Story	SFA-T		19.6	577	1,450	473,000	8/30/2010	6.0	0.03	9.0	2.38	0.0%	10.0%
Mesas West 10 16 Plex	SFA-M		35.7	464	1,450	473,000	11/30/2011	6.0	0.08	8.0	2.38	0.0%	10.0%
Mesas West 12B 16 Plex	SFA-M		14.1	208	1,450	473,000	2/28/2012	6.0	0.07	4.0	2.38	0.0%	10.0%
Apartment Use			7.4	187	1,100	1,700	2/28/2014	25.0	0.04	1.0	2.38		
Non-Residential Uses			Acres	GLA	FAR	Rent \$/SF/Mo.	Absorption		ASSUMPTIONS				
							Start Date	Term (Mos.)	Cap. Rate	Op. Exps.	SF/Empl.	Real Inflation	Turnover
Apartment Use									5.8%	30.0%		0.0%	10.0%
Commercial - Retail			3.3	27,500		2.75	5/31/2014	9.0	7.1%	10.0%	400	0.0%	5.0%
Commercial - Office			11.7	132,500	44% mult story	2.45	5/31/2014	12.0	7.2%	30.0%	250	0.0%	5.0%
Commercial - Other													
Industrial R&D			61.7	1,090,000	37% Single Story	0.65	5/31/2014	12.0	7.4%	10.0%	500	0.0%	5.0%

A-6.3

Assumptions for Product Absorption; Population & Employee Estimates; & Assessed Value – by Community: POTRERO

Community Use	Product	Type	DATA PER NEWHALL LAND						INFERRED DATA		ASSUMPTIONS		
			Acres	Units	Avg. Unit Size - SF	Unit Price	Absorption		Acres per Unit	Absorption Term (Yrs.)	Household Size	Real Home Price Inflation	Turnover Rate
							Start Date	Units / Mo.					
POTRERO			862.5										
Residential for Sale			810.0	7,908									
	PE1 140 x 100 estates	SFD-E	45.0	90	5,000	2,500,000	8/30/2017	3.0	0.50	4.0	3.17	0.0%	10.0%
	PE 2 140 x 100 estates	SFD-E	8.0	15	5,000	2,500,000	11/30/2017	3.0	0.53	2.0	3.17	0.0%	10.0%
	P 6500	SFD-E	55.0	224	4,200	935,000	8/30/2017	4.0	0.25	6.0	3.17	0.0%	10.0%
	P6000	SFD-E	42.0	257	3,800	861,000	5/31/2015	4.0	0.16	6.0	3.17	0.0%	10.0%
	P5500	SFD	41.0	250	2,400	796,000	5/31/2016	4.0	0.16	6.0	3.17	0.0%	10.0%
	P5000	SFD	38.0	225	3,200	759,000	11/30/2015	4.0	0.17	6.0	3.17	0.0%	10.0%
	P4500	SFD	56.0	392	2,800	691,000	8/30/2016	4.0	0.14	9.0	3.17	0.0%	10.0%
	P3500	SFD	35.0	276	2,500	625,000	8/30/2016	4.0	0.13	7.0	3.17	0.0%	10.0%
	A1	SFD	76.0	180	2,713	676,000	2/28/2017	6.0	0.42	3.0	3.17	0.0%	10.0%
	A2	SFD	31.0	248	2,495	693,000	8/30/2015	6.0	0.13	5.0	3.17	0.0%	10.0%
	B1	SFD	50.0	498	1,975	551,000	11/30/2015	6.0	0.10	8.0	3.17	0.0%	10.0%
	B2	SFD	60.0	540	1,650	496,000	2/28/2016	6.0	0.11	8.0	3.17	0.0%	10.0%
	C1	SFD	11.0	150	2,100	572,000	2/28/2017	6.0	0.07	3.0	3.17	0.0%	10.0%
	D	SFD	22.0	286	1,622	491,000	2/28/2015	6.0	0.08	5.0	3.17	0.0%	10.0%
	E	SFD	18.0	270	1,200	420,000	8/30/2015	6.0	0.07	5.0	3.17	0.0%	10.0%
	F	SFD	13.0	234	1,050	394,000	11/30/2015	6.0	0.06	5.0	3.17	0.0%	10.0%
	G1	SFD	18.0	324	1,675	500,000	8/30/2015	6.0	0.06	6.0	3.17	0.0%	10.0%
	G2	SFD	23.0	414	1,600	487,000	2/28/2017	6.0	0.06	6.0	3.17	0.0%	10.0%
	H1	SFD	17.0	374	1,440	460,000	2/28/2016	6.0	0.05	6.0	3.17	0.0%	10.0%
	H2	SFD	12.0	240	1,525	475,000	11/30/2014	6.0	0.05	5.0	3.17	0.0%	10.0%
	I	SFD	11.0	242	1,413	456,000	11/30/2014	6.0	0.05	5.0	3.17	0.0%	10.0%
	Lofts	SFD-C	25.0	500	1,925	543,000	5/31/2016	6.0	0.05	8.0	3.17	0.0%	10.0%
	Seniors 1	SNR	20.0	500	1,300	437,000	11/30/2016	6.0	0.04	8.0	2.00	0.0%	10.0%
	Seniors 2	SNR	30.0	450	1,500	470,000	5/31/2017	6.0	0.07	7.0	2.00	0.0%	10.0%
	Seniors 3	SNR	23.0	220	1,075	398,000	8/30/2017	6.0	0.10	4.0	2.00	0.0%	10.0%
	Seniors 4	SNR	30.0	509	1,981	532,000	11/30/2017	6.0	0.06	8.0	2.00	0.0%	10.0%
Apartment Use			20.0	520	1,100	1,700	11/30/2017	25.0	0.04	3.0	2.38		
Non-Residential Uses			Acres	GLA	FAR	Rent \$/SF/Mo.	Absorption		ASSUMPTIONS				
							Start Date	Term (Mos.)	Cap. Rate	Op. Exps.	SF/Empl.	Real Inflation	Turnover
Apartment Use									5.8%	30%		0.0%	10.0%
Commercial - Retail			32.5	628,500	44% mult story	3.00	2/28/2016	24	7.1%	30%	400	0.0%	5.0%
Commercial - Office			32.5	628,500	44% mult story	3.00	2/28/2016	24	7.2%	10%	250	0.0%	5.0%
Commercial - Other													
Industrial R&D													

A-6.4

Assumptions for Product Absorption; Population & Employee Estimates; & Assessed Value – by Community: MISSION VILLAGE

Community Use	Product	Type	DATA PER NEWHALL LAND						INFERRED DATA		ASSUMPTIONS		
			Acres	Units	Avg. Unit Size - SF	Unit Price	Absorption		Acres per Unit	Absorption Term (Yrs.)	Household Size	Real Home Price Inflation	Turnover Rate
							Start Date	Units / Mo.					
MISSION VALLEY			413.8										
Residential for Sale			317.4	4,285									
	A2 SFD	SFD-E	28.7	123	3,633	843,500	2/28/2010	4.0	0.23	3.0	3.17	0.0%	10.0%
	A7 SFD	SFD-E	25.1	95	4,025	1,080,000	11/30/2010	4.0	0.26	3.0	3.17	0.0%	10.0%
	A8 Custom	SFD-E	42.5	73	5,000	2,509,000	8/30/2010	3.0	0.58	3.0	3.17	0.0%	10.0%
	SeniorsArea C (SFD)	SNR	37.0	212	2,160	616,000	8/30/2010	4.0	0.17	6.0	2.00	0.0%	10.0%
	A3a Duplex	SFD-C	7.0	80	1,667	507,500	8/30/2009	6.0	0.09	2.0	3.17	0.0%	10.0%
	A3b Towns-Flats	SFA-T	10.4	168	1,467	473,500	2/28/2010	6.0	0.06	3.0	2.38	0.0%	10.0%
	A4 Condo	SFD-C	12.6	264	1,167	422,500	8/30/2010	6.0	0.05	5.0	3.17	0.0%	10.0%
	A5 3/4 Plex Towns	SFA-T	10.9	153	1,650	504,500	2/28/2010	6.0	0.07	3.0	2.38	0.0%	10.0%
	A6 3 Story Towns	SFA-T	12.4	216	1,680	509,500	8/30/2010	6.0	0.06	4.0	2.38	0.0%	10.0%
	A9 Duplex	SFA-F	6.4	60	1,975	559,500	11/30/2010	6.0	0.11	2.0	2.38	0.0%	10.0%
	A10 Duplex	SFA-F	7.9	80	2,100	580,500	4/30/2010	6.0	0.10	2.0	2.38	0.0%	10.0%
	B1 Duplex	SFA-F	8.7	92	1,750	521,500	8/30/2009	6.0	0.09	2.0	2.38	0.0%	10.0%
	B2 3 Story Town	SFA-T	11.1	186	1,150	419,500	8/30/2009	6.0	0.06	4.0	2.38	0.0%	10.0%
	B6 Towns/Flats	SFA-T	6.4	180	1,125	415,500	5/31/2011	6.0	0.04	3.0	2.38	0.0%	10.0%
	B7	SFA-F	4.8	230	1,667	507,500	5/31/2011	6.0	0.02	4.0	2.38	0.0%	10.0%
	Senior C6 Flats	SNR	21.3	440	1,650	504,500	8/30/2010	6.0	0.05	7.0	2.00	0.0%	10.0%
	Senior Area C Duplex	SNR	34.4	194	2,202	597,500	8/30/2010	6.0	0.18	4.0	2.00	0.0%	10.0%
	D2 Towns 2/3 Story	SFA-T	7.6	156	1,200	428,500	5/31/2012	6.0	0.05	3.0	2.38	0.0%	10.0%
	F2a Live/Work 3 Story	SFA-F	0.4	15	2,450	671,500	8/30/2011	6.0	0.03	1.0	2.38	0.0%	10.0%
	F2b Condo 4/5 Story	SFA-F	3.2	242	1,500	478,500	2/28/2012	8.0	0.01	3.0	2.38	0.0%	10.0%
	F3a Live/Work 3 Story	SFA-F	0.4	15	2,450	671,500	11/30/2011	6.0	0.03	2.0	2.38	0.0%	10.0%
	F3b Condo 4/5 Story	SFA-F	3.6	217	1,600	495,500	2/28/2012	8.0	0.02	3.0	2.38	0.0%	10.0%
	F5a Condo 4/5 Story	SFA-F	2.0	140	1,350	453,500	5/31/2012	8.0	0.01	2.0	2.38	0.0%	10.0%
	F5b Condo 4/5 Story	SFA-F	2.1	171	1,100	411,500	8/30/2012	8.0	0.01	3.0	2.38	0.0%	10.0%
	F6a Condo 4 Story	SFA-F	2.0	76	1,450	470,500	8/30/2012	8.0	0.03	2.0	2.38	0.0%	10.0%
	F6b Condo 4 Story	SFA-F	2.1	81	1,400	478,500	8/30/2012	8.0	0.03	2.0	2.38	0.0%	10.0%
	F7 Condo 3 Story	SFA-F	2.1	138	1,200	428,500	5/31/2011	8.0	0.02	2.0	2.38	0.0%	10.0%
	F8a Condo 3/4 Story	SFA-F	2.0	74	1,150	419,500	8/30/2011	8.0	0.03	2.0	2.38	0.0%	10.0%
	F8b Condo 3/4 Story	SFA-F	2.1	114	1,050	402,500	8/30/2011	8.0	0.02	2.0	2.38	0.0%	10.0%
Apartment Use			27.6	1,046									
	B3 -Market Rate		5.4	170	1,100	1,700	4/30/2010	25.0	0.03	1.0	2.50		
	D1 Low & Mod		10.9	314	1,100	1,500	5/31/2012	25.0	0.03	2.0	2.50		
	F9 -Low		3.6	188	900	900	5/31/2012	25.0	0.02	2.0	2.50		
	F4 -Market Rate		4.1	214	1,100	1,700	8/30/2012	25.0	0.02	2.0	2.50		
	F1a -Market Rate		0.4	15	1,100	1,700	2/28/2012	25.0	0.03	1.0	2.50		
	F1b -Market Rate		3.2	145	1,100	1,700	2/28/2012	25.0	0.02	1.0	2.50		
Non-Residential Uses			Acres	GLA	FAR	Rent \$/SF/Mo.	Absorption		ASSUMPTIONS				
							Start Date	Term (Mos.)	Cap. Rate	Op. Exps.	SF/Empl.	Real Inflation	Turnover
Apartment Use													
	B3 -Market Rate								5.8%	30%		0.0%	10.0%
	D1 Low & Mod								5.8%	30%		0.0%	10.0%
	F9 -Low								5.8%	30%		0.0%	10.0%
	F4 -Market Rate								5.8%	30%		0.0%	10.0%
	F1a -Market Rate								5.8%	30%		0.0%	10.0%
	F1b -Market Rate								5.8%	30%		0.0%	10.0%
Commercial - Retail			17.8	314,850									
	F10		5.0	97,650	44% mult story	3.00	5/31/2012	12.0	7.1%	10%	400	0.0%	5.0%
	F11		3.4	73,500	44% mult story	3.00	2/28/2013	12.0	7.1%	10%	400	0.0%	5.0%
	F5B/F6B		0.4	16,000	single story	4.00	8/31/2012	6.0	7.1%	10%	400	0.0%	5.0%
	F14		6.2	121,500	33.6 muti s-story	2.50	5/31/2013	24.0	7.1%	10%	400	0.0%	5.0%
	E2		2.9	6,200	single story	4.00	5/31/2014	6.0	7.1%	10%	400	0.0%	5.0%
Commercial - Office			51.0	984,150	-	3.00	5/31/2014	60.0	7.2%	30%	250	0.0%	5.0%

A-6.5

Assumptions for Product Absorption; Population & Employee Estimates; & Assessed Value – by Community: LEGACY

Community Use	Product	Type	DATA PER NEWHALL LAND					INFERRED DATA		ASSUMPTIONS			
			Acres	Units	Avg. Unit Size - SF	Unit Price	Absorption		Acres per Unit	Absorption Term (Yrs.)	Household Size	Real Home Price Inflation	Turnover Rate
							Start Date	Units / Mo.					
LEGACY			293.5										
Residential for Sale			225.4	2,741									
	A1 - Triplex	SFA-F	11.8	108	1,400	453,000	6/1/2013	6.0	0.11	2.0	2.38	0.0%	10.0%
	A2 - 45x100	SFD	9.2	98	1,700	510,000	6/1/2012	4.0	0.09	3.0	3.17	0.0%	10.0%
	A3 - Triplex	SFA-F	5.0	45	1,400	453,000	6/1/2014	6.0	0.11	2.0	2.38	0.0%	10.0%
	A4 - 55x110	SFD	7.2	108	2,300	624,000	3/1/2014	4.0	0.07	3.0	3.17	0.0%	10.0%
	A5 Luxury Flats	SFA-F	11.2	300	1,700	510,000	6/1/2013	6.0	0.04	5.0	2.38	0.0%	10.0%
	A6 - 45x100	SFD	9.7	38	1,700	510,000	9/1/2013	4.0	0.25	2.0	3.17	0.0%	10.0%
	A7 - 60x110	SFD	6.6	92	2,600	682,000	9/1/2013	4.0	0.07	3.0	3.17	0.0%	10.0%
	A8 - 50x105	SFD	8.3	116	2,000	615,000	3/1/2013	4.0	0.07	3.0	3.17	0.0%	10.0%
	A9 - 50x105	SFD	8.3	138	2,000	615,000	9/1/2012	4.0	0.06	4.0	3.17	0.0%	10.0%
	A10 - 55x110	SFD	7.2	109	2,300	624,000	12/1/2012	4.0	0.07	4.0	3.17	0.0%	10.0%
	A11 - 60x110	SFD	6.6	98	2,600	682,000	12/1/2013	4.0	0.07	3.0	3.17	0.0%	10.0%
	A12 - 45x100	SFD	9.7	65	1,250	428,000	3/1/2014	6.0	0.15	2.0	3.17	0.0%	10.0%
	A13 - Duplex	SFA-F	4.4	44	1,250	472,000	3/1/2013	6.0	0.10	1.0	2.38	0.0%	10.0%
	B3 - Condos	SFA-T	4.6	72	1,279	433,000	3/1/2014	6.0	0.06	2.0	3.17	0.0%	10.0%
	B4 - Condos	SFA-T	4.7	88	1,560	483,000	3/1/2014	6.0	0.05	2.0	3.17	0.0%	10.0%
	B6 - Condos	SFA-T	15.5	278	1,560	483,000	6/1/2014	6.0	0.06	5.0	3.17	0.0%	10.0%
	B8 Temp School	SFD	2.2	13	3,800	910,000	3/1/2014	4.0	0.17	1.0	3.17	0.0%	10.0%
	B9 - Condos	SFA-T	4.9	74	1,450	462,000	9/1/2014	6.0	0.07	2.0	3.17	0.0%	10.0%
	B10 - Condos	SFA-T	4.6	74	1,325	438,000	12/1/2014	6.0	0.06	2.0	3.17	0.0%	10.0%
	B11 - Condos	SFA-T	6.0	104	1,200	420,000	12/1/2013	6.0	0.06	3.0	3.17	0.0%	10.0%
	B12 - Condos	SFA-T	7.0	160	1,006	387,000	12/1/2013	6.0	0.04	4.0	3.17	0.0%	10.0%
	C1a - 45x100	SFD	9.7	82	1,700	510,000	6/1/2014	4.0	0.12	3.0	3.17	0.0%	10.0%
	C1b - 45x100	SFD	9.7	82	1,700	510,000	9/1/2014	4.0	0.12	3.0	3.17	0.0%	10.0%
	C2a - 50x100	SFD	8.7	87	2,200	649,000	12/1/2014	4.0	0.10	3.0	3.17	0.0%	10.0%
	C2b - 45x100	SFD	9.7	52	1,700	510,000	9/1/2014	4.0	0.19	2.0	3.17	0.0%	10.0%
	C3 - 60x100	SFD	7.3	77	2,500	663,000	12/1/2014	4.0	0.09	3.0	3.17	0.0%	10.0%
	C4 - 60x100	SFD	9.4	68	2,500	663,000	12/1/2014	4.0	0.14	3.0	3.17	0.0%	10.0%
	D - SFR	SFD-E	16.3	71	5,000	1,237,500	9/1/2014	4.0	0.23	3.0	3.17	0.0%	10.0%
Apartment Use			40.1	739									
	B5 - Apts		4.4	144	1,200	1,700	12/1/2013	6.0	0.03	3.0	2.50		
	B7 - Apts		10.9	323	1,100	1,700	9/1/2013	6.0	0.03	6.0	2.50		
	C5 - Apts		11.8	272	1,500	2,000	12/1/2014	6.0	0.04	5.0	2.50		
Non-Residential Uses			Acres	GLA	FAR	Rent \$/SF/Mo.	Absorption		ASSUMPTIONS				
							Start Date	Term (Mos.)	Cap. Rate	Op. Exps.	SF/Empl.	Real Inflation	Turnover
Apartment Use													
	B5 - Apts								5.8%	30.0%		0.0%	10.0%
	B7 - Apts								5.8%	30.0%		0.0%	10.0%
	C5 - Apts								5.8%	30.0%		0.0%	10.0%
Commercial - Retail			15.0	170,000	-	3.00	10/1/2014	12.0	7.1%	10.0%	400	0.0%	5.0%
Commercial - Office			13.0	316,000	-	2.70	10/1/2014	24.0	7.2%	30.0%	250	0.0%	5.0%
Commercial - Other													
Industrial R&D													

A-6.6

Assumptions for Product Absorption; Population & Employee Estimates; & Assessed Value – by Community: LANDMARK

Community Use	Product	Type	DATA PER NEWHALL LAND					INFERRED DATA		ASSUMPTIONS				
			Acres	Units	Avg. Unit Size - SF	Unit Price	Absorption		Acres per Unit	Absorption Term (Yrs.)	Household Size	Real Home Price Inflation	Turnover Rate	
							Start Date	Units / Mo.						
LANDMARK			174.7											
Residential for Sale			110.6	993										
Area D Alley			SFD	14.6	141	2,050	564,000	6/1/2009	4.0	0.10	3.0	3.17	0.0%	10.0%
Area E Alley			SFD	15.9	141	2,400	623,000	6/1/2009	4.0	0.11	3.0	3.17	0.0%	10.0%
Area F Alley / Traditional			SFD	15.2	114	2,700	674,000	6/1/2009	4.0	0.13	3.0	3.17	0.0%	10.0%
Area G SFD			SFD	17.3	107	3,175	755,000	6/1/2009	4.0	0.16	3.0	3.17	0.0%	10.0%
Area H SFD			SFD	17.4	87	3,525	816,000	6/1/2009	4.0	0.20	2.0	3.17	0.0%	10.0%
Area A Condo			SFD-C	8.6	144	1,200	420,000	12/1/2009	6.0	0.06	2.0	3.17	0.0%	10.0%
Area B Condo			SFD-C	10.9	153	1,500	470,000	10/1/2009	6.0	0.07	3.0	3.17	0.0%	10.0%
Area C Condo			SFD-C	10.7	106	1,800	521,000	10/1/2009	6.0	0.10	2.0	3.17	0.0%	10.0%
Other Land Uses/Apartments			21.0	451										
Market Rate			14.0	299		1,100	1,700	1/1/2010	25.0	0.05	1.0	2.50		
Affordable - 50%			7.0	152		1,100	1,700	1/1/2010	25.0	0.05	1.0	2.50		
Non-Residential Uses			Acres	GLA	FAR	Rent \$/SF/Mo.	Absorption		ASSUMPTIONS					
							Start Date	Term (Mos.)	Cap. Rate	Op. Exps.	SF/Empl.	Real Inflation	Turnover	
Other Land Uses/Apartments														
Market Rate										5.8%	30.0%		0.0%	10.0%
Affordable - 50%										5.8%	30.0%		0.0%	10.0%
Commercial - Retail			8.7	94,199										
Lot 10			0.6	6,534	25% single story	3.00	1/1/2010	6.0	7.1%	10%	400	0.0%	5.0%	
Lot 10			0.7	7,079	25% single story	3.00	1/1/2010	6.0	7.1%	10%	400	0.0%	5.0%	
Lot 29			7.4	80,586	25% single story	2.25	1/1/2010	12.0	7.1%	10%	400	0.0%	5.0%	
Commercial - Office			34.5	279,502										
Lot 15			8.7	94,199	N/A	2.50	1/1/2010	12.0	7.2%	30%	250	0.0%	5.0%	
Lot 30			25.8	185,303	N/A	2.50	1/1/2015	12.0	7.2%	30%	250	0.0%	5.0%	
Commercial - Other														
Industrial R&D														

Notes on Assumptions:

Cap Rate:	Per Real Estate Research Corporation, "RERC Real Estate Report - Winter 2006"
Household Size:	Per Newhall Ranch Specific Plan Revised Draft EIR
Square Feet per Employee:	Per Newhall Ranch Specific Plan Revised Draft EIR
Real Home Price Inflation:	Calculated based on historic differential of Housing Price Appreciation data (California Association of Realtors), and Consumer Price Index (Bureau of Labor Statistics) for Los Angeles County.

ASSESSED VALUE ASSUMPTIONS

Total Project Area:	3,258	Acres	
Base Year Assessed Value	252,388,205	(In 2006 \$'s)	
Per Acre:	77,462	\$/Acre	
	Acreage	Base AV	Base AV/Acre
Entrada	355.3	52,006,842	146,385
Homestead	983.5	76,532,255	77,820
Potrero	862.5	69,593,580	80,688
Mission Village	413.8	30,731,580	74,269
Legacy	293.5	1,101,288	3,752
Landmark	174.7	7,436,820	42,574
VCC	175.0	14,985,840	85,621

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A-6.7

Assumptions for Product Absorption; Population & Employee Estimates; & Assessed Value – by Community: COMMERCE CENTER

Community Use	DATA PER NEWHALL LAND						ASSUMPTIONS				
	Acres	GLA	FAR	Rent \$/SF/Mo.	Absorption		Cap. Rate	Op. Exps.	SF/Empl.	Real Inflation	Turnover
					Start Date	Term (Mos.)					
VALENCIA COMMERCE CENTER	175.0										
Commercial - Retail	19.7	300,715									
Phase 1	-		0.35	3.50	7/1/2010	12.0	7.1%	10%	400	0.0%	5.0%
Phase 2	6.0	91,429	0.35	3.50	1/1/2011	12.0	7.1%	10%	400	0.0%	5.0%
Phase 3	13.7	209,286	0.35	3.50	10/1/2011	12.0	7.1%	10%	400	0.0%	5.0%
Phase 4	-		0.35	3.50	7/1/2012	12.0	7.1%	10%	400	0.0%	5.0%
Phase 5	-		0.35	3.50	1/1/2013	12.0	7.1%	10%	400	0.0%	5.0%
Phase 6	-		0.35	3.50	7/1/2013	12.0	7.1%	10%	400	0.0%	5.0%
Commercial - Office	44.4	1,159,795									
Phase 1	7.0	182,857	0.60	2.75	7/1/2010	12.0	7.2%	30%	250	0.0%	5.0%
Phase 2	6.3	164,572	0.60	2.75	1/1/2011	12.0	7.2%	30%	250	0.0%	5.0%
Phase 3	4.5	117,508	0.60	2.75	10/1/2011	12.0	7.2%	30%	250	0.0%	5.0%
Phase 4	8.4	219,429	0.60	2.75	7/1/2012	12.0	7.2%	30%	250	0.0%	5.0%
Phase 5	8.4	219,429	0.60	2.75	1/1/2013	12.0	7.2%	30%	250	0.0%	5.0%
Phase 6	9.8	256,000	0.60	2.75	7/1/2013	12.0	7.2%	30%	250	0.0%	5.0%
Industrial R&D	110.9	1,739,492									
Phase 1	17.5	274,286	0.36	1.50	7/1/2010	12.0	7.4%	10%	500	0.0%	5.0%
Phase 2	7.0	109,714	0.36	1.50	1/1/2011	12.0	7.4%	10%	500	0.0%	5.0%
Phase 3	20.0	313,206	0.36	1.50	10/1/2011	12.0	7.4%	10%	500	0.0%	5.0%
Phase 4	21.0	329,143	0.36	1.50	7/1/2012	12.0	7.4%	10%	500	0.0%	5.0%
Phase 5	21.0	329,143	0.36	1.50	1/1/2013	12.0	7.4%	10%	500	0.0%	5.0%
Phase 6	24.5	384,000	0.36	1.50	7/1/2013	12.0	7.4%	10%	500	0.0%	5.0%

A-7.1

Product Level Absorption Schedule – by Community: ENTRADA

Use - Product	Total	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION - UNITS	3,535	88	514	575	587	616	382	327	240	144	62	-	-	-	-
Residential for Sale	2,827	88	514	569	455	472	238	183	144	102	62	-	-	-	-
PA5 - SFD	132	12	48	48	24	-	-	-	-	-	-	-	-	-	-
PA6 - SFD	121	4	48	48	21	-	-	-	-	-	-	-	-	-	-
PA7 - SFD	166	-	40	48	48	30	-	-	-	-	-	-	-	-	-
PA4 - SFA	153	72	72	9	-	-	-	-	-	-	-	-	-	-	-
PA8 - SFA	116	-	60	56	-	-	-	-	-	-	-	-	-	-	-
PA13 - SFA	176	-	42	72	62	-	-	-	-	-	-	-	-	-	-
PA12 - SFA	144	-	42	72	30	-	-	-	-	-	-	-	-	-	-
PA11 - SFA	280	-	42	72	72	72	22	-	-	-	-	-	-	-	-
PA9 - Apt/Condo	261	-	60	72	72	57	-	-	-	-	-	-	-	-	-
PA10 - Apt/Condo	273	-	60	72	72	69	-	-	-	-	-	-	-	-	-
PA15a - Loft Over Retail	153	-	-	-	-	42	72	39	-	-	-	-	-	-	-
PA15b - Condo on Podium	464	-	-	-	42	72	72	72	72	72	62	-	-	-	-
PA15c - Townhomes	64	-	-	-	6	58	-	-	-	-	-	-	-	-	-
PA15d - Tower Condos	324	-	-	-	6	72	72	72	72	30	-	-	-	-	-
Apartments	708	-	-	6	132	144	144	144	96	42	-	-	-	-	-
PA1a - Apt	408	-	-	6	72	72	72	72	72	42	-	-	-	-	-
PA15e - Apt	300	-	-	-	60	72	72	72	24	-	-	-	-	-	-
ABSORPTION - SF	2,987,776	-	-	111,313	97,075	1,330,646	1,045,408	73,333	73,333	73,333	73,333	73,333	36,667	-	-
Commercial - Retail	1,529,388	-	-	111,313	97,075	660,500	660,500	-	-	-	-	-	-	-	-
PA14	14,238	-	-	14,238	-	-	-	-	-	-	-	-	-	-	-
PA3	194,150	-	-	97,075	97,075	-	-	-	-	-	-	-	-	-	-
PA1b	750,000	-	-	-	-	375,000	375,000	-	-	-	-	-	-	-	-
PA15f	571,000	-	-	-	-	285,500	285,500	-	-	-	-	-	-	-	-
Commercial - Office	1,173,150	-	-	-	-	384,908	384,908	73,333	73,333	73,333	73,333	73,333	36,667	-	-
PA1b - Lots 2-7	550,000	-	-	-	-	-	-	73,333	73,333	73,333	73,333	73,333	36,667	-	-
PA15g	623,150	-	-	-	-	311,575	311,575	-	-	-	-	-	-	-	-
Commercial - Other	170,024	-	-	-	-	170,024	-	-	-	-	-	-	-	-	-
PA1b - Lot 1 Hospitality	165,000	-	-	-	-	165,000	-	-	-	-	-	-	-	-	-
PA1b - Lot 24 Service Stn	5,024	-	-	-	-	5,024	-	-	-	-	-	-	-	-	-
Industrial R&D	115,214	-	-	-	-	115,214	-	-	-	-	-	-	-	-	-
PA1b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PA2	115,214	-	-	-	-	115,214	-	-	-	-	-	-	-	-	-

Product Level Cumulative Population & Employee Estimates – by Community: ENTRADA

Use - Product	By 2031	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CUM. POPULATION	8,744	222	1,553	3,035	4,506	5,995	6,905	7,683	8,254	8,597	8,744	8,744	8,744	8,744	8,744
Residential for Sale	7,059	222	1,553	3,021	4,177	5,324	5,891	6,326	6,669	6,912	7,059	7,059	7,059	7,059	7,059
PA5 - SFD	418	38	190	342	418	418	418	418	418	418	418	418	418	418	418
PA6 - SFD	384	13	165	317	384	384	384	384	384	384	384	384	384	384	384
PA7 - SFD	526	-	127	279	431	526	526	526	526	526	526	526	526	526	526
PA4 - SFA	364	171	343	364	364	364	364	364	364	364	364	364	364	364	364
PA8 - SFA	276	-	143	276	276	276	276	276	276	276	276	276	276	276	276
PA13 - SFA	419	-	100	271	419	419	419	419	419	419	419	419	419	419	419
PA12 - SFA	343	-	100	271	343	343	343	343	343	343	343	343	343	343	343
PA11 - SFA	666	-	100	271	443	614	666	666	666	666	666	666	666	666	666
PA9 - Apt/Condo	621	-	143	314	486	621	621	621	621	621	621	621	621	621	621
PA10 - Apt/Condo	650	-	143	314	486	650	650	650	650	650	650	650	650	650	650
PA15a - Loft Over Retail	364	-	-	-	100	271	364	364	364	364	364	364	364	364	364
PA15b - Condo on Podium	1,104	-	-	-	100	271	443	614	785	957	1,104	1,104	1,104	1,104	1,104
PA15c - Townhomes	152	-	-	-	14	152	152	152	152	152	152	152	152	152	152
PA15d - Tower Condos	771	-	-	-	14	186	357	528	700	771	771	771	771	771	771
Apartments	1,685	-	-	14	328	671	1,014	1,357	1,585	1,685	1,685	1,685	1,685	1,685	1,685
PA1a - Apt	971	-	-	14	186	357	528	700	871	971	971	971	971	971	971
PA15e - Apt	714	-	-	-	143	314	486	657	714	714	714	714	714	714	714
CUM. EMPLOYEES	8,899	-	-	278	521	4,094	7,285	7,579	7,872	8,165	8,459	8,752	8,899	8,899	8,899
Commercial - Retail	3,823	-	-	278	521	2,172	3,823	3,823	3,823	3,823	3,823	3,823	3,823	3,823	3,823
PA14	36	-	-	36	36	36	36	36	36	36	36	36	36	36	36
PA3	485	-	-	243	485	485	485	485	485	485	485	485	485	485	485
PA1b	1,875	-	-	-	-	938	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875
PA15f	1,428	-	-	-	-	714	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428
Commercial - Office	4,693	-	-	-	-	1,540	3,079	3,373	3,666	3,959	4,253	4,546	4,693	4,693	4,693
PA1b - Lots 2-7	2,200	-	-	-	-	293	587	880	1,173	1,467	1,760	2,053	2,200	2,200	2,200
PA15g	2,493	-	-	-	-	1,246	2,493	2,493	2,493	2,493	2,493	2,493	2,493	2,493	2,493
Commercial - Other	152	-	-	-	-	152	152	152	152	152	152	152	152	152	152
PA1b - Lot 1 Hospitality	149	-	-	-	-	149	149	149	149	149	149	149	149	149	149
PA1b - Lot 24 Service Stn	4	-	-	-	-	4	4	4	4	4	4	4	4	4	4
Industrial R&D	230	-	-	-	-	230	230	230	230	230	230	230	230	230	230
PA1b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PA2	230	-	-	-	-	230	230	230	230	230	230	230	230	230	230

A-7.1 ...Continued
Product Level Cumulative Assessed Values – by Community: ENTRADA

Use - Product	By 2031	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ASSESSED VALUE	2,591,870	51,089,387	312,775,522	637,107,621	911,886,916	1,626,974,916	2,181,893,401	2,325,353,341	2,439,104,916	2,514,997,135	2,561,205,383	2,582,499,330	2,591,869,828	2,591,869,828	2,591,869,828
Residential for Sale	1,337,977,187	51,089,387	312,775,522	584,302,164	785,684,669	996,589,254	1,108,188,781	1,196,198,371	1,267,157,010	1,313,382,004	1,337,977,187	1,337,977,187	1,337,977,187	1,337,977,187	1,337,977,187
PA5 - SFD	81,140,238	7,708,473	38,298,834	67,915,071	81,140,238	81,140,238	81,140,238	81,140,238	81,140,238	81,140,238	81,140,238	81,140,238	81,140,238	81,140,238	81,140,238
PA6 - SFD	83,216,073	2,866,427	37,173,979	70,406,655	83,216,073	83,216,073	83,216,073	83,216,073	83,216,073	83,216,073	83,216,073	83,216,073	83,216,073	83,216,073	83,216,073
PA7 - SFD	83,949,204	-	21,267,089	46,134,684	70,218,786	83,949,204	83,949,204	83,949,204	83,949,204	83,949,204	83,949,204	83,949,204	83,949,204	83,949,204	83,949,204
PA4 - SFA	81,546,747	40,514,487	79,513,462	81,546,747	81,546,747	81,546,747	81,546,747	81,546,747	81,546,747	81,546,747	81,546,747	81,546,747	81,546,747	81,546,747	81,546,747
PA8 - SFA	59,173,530	-	31,088,710	59,173,530	59,173,530	59,173,530	59,173,530	59,173,530	59,173,530	59,173,530	59,173,530	59,173,530	59,173,530	59,173,530	59,173,530
PA13 - SFA	83,572,431	-	20,395,482	54,849,148	83,572,431	83,572,431	83,572,431	83,572,431	83,572,431	83,572,431	83,572,431	83,572,431	83,572,431	83,572,431	83,572,431
PA12 - SFA	62,204,330	-	18,623,966	50,106,732	62,204,330	62,204,330	62,204,330	62,204,330	62,204,330	62,204,330	62,204,330	62,204,330	62,204,330	62,204,330	62,204,330
PA11 - SFA	111,899,137	-	17,396,550	104,540,139	111,899,137	111,899,137	111,899,137	111,899,137	111,899,137	111,899,137	111,899,137	111,899,137	111,899,137	111,899,137	111,899,137
PA9 - Apt/Condo	101,989,414	-	24,033,006	52,485,619	101,989,414	101,989,414	101,989,414	101,989,414	101,989,414	101,989,414	101,989,414	101,989,414	101,989,414	101,989,414	101,989,414
PA10 - Apt/Condo	112,256,555	-	24,984,444	54,750,222	112,256,555	112,256,555	112,256,555	112,256,555	112,256,555	112,256,555	112,256,555	112,256,555	112,256,555	112,256,555	112,256,555
PA15a - Loft Over Retail	68,834,614	-	-	-	-	19,343,190	52,064,135	68,834,614	68,834,614	68,834,614	68,834,614	68,834,614	68,834,614	68,834,614	68,834,614
PA15b - Condo on Podium	189,287,560	-	-	-	17,509,219	47,394,242	77,055,070	106,491,702	135,704,137	164,692,377	189,287,560	189,287,560	189,287,560	189,287,560	189,287,560
PA15c - Townhomes	30,854,815	-	-	-	2,897,213	30,854,815	30,854,815	30,854,815	30,854,815	30,854,815	30,854,815	30,854,815	30,854,815	30,854,815	30,854,815
PA15d - Tower Condos	188,052,538	-	-	-	3,493,310	45,408,344	87,267,100	129,069,580	170,815,783	188,052,538	188,052,538	188,052,538	188,052,538	188,052,538	188,052,538
Apartment	162,129,557	-	-	1,438,923	33,288,733	67,451,571	100,972,954	133,852,883	154,394,516	162,129,557	162,129,557	162,129,557	162,129,557	162,129,557	162,129,557
PA1a - Apt	90,719,550	-	-	1,438,923	18,667,681	35,436,618	51,745,736	67,595,032	82,984,509	90,719,550	90,719,550	90,719,550	90,719,550	90,719,550	90,719,550
PA15e - Apt	71,410,007	-	-	-	-	14,621,052	32,014,952	49,227,219	66,257,851	71,410,007	71,410,007	71,410,007	71,410,007	71,410,007	71,410,007
Commercial - Retail	669,924,454	-	-	51,366,534	92,913,515	385,720,917	669,924,454	669,924,454	669,924,454	669,924,454	669,924,454	669,924,454	669,924,454	669,924,454	669,924,454
PA14	8,443,536	-	-	8,443,536	8,443,536	8,443,536	8,443,536	8,443,536	8,443,536	8,443,536	8,443,536	8,443,536	8,443,536	8,443,536	8,443,536
PA3	84,469,978	-	-	42,922,997	84,469,978	84,469,978	84,469,978	84,469,978	84,469,978	84,469,978	84,469,978	84,469,978	84,469,978	84,469,978	84,469,978
PA1b	327,598,944	-	-	-	-	166,241,901	327,598,944	327,598,944	327,598,944	327,598,944	327,598,944	327,598,944	327,598,944	327,598,944	327,598,944
PA15f	249,411,996	-	-	-	-	126,565,501	249,411,996	249,411,996	249,411,996	249,411,996	249,411,996	249,411,996	249,411,996	249,411,996	249,411,996
Commercial - Office	371,894,467	-	-	-	0	127,269,012	252,863,049	275,433,470	297,684,773	319,616,957	341,230,022	362,523,969	371,894,467	371,894,467	371,894,467
PA1b - Lots 2-7	165,129,618	-	-	-	-	23,208,659	46,098,199	68,668,621	90,919,924	112,852,108	134,465,178	155,759,119	165,129,618	165,129,618	165,129,618
PA15g	206,764,849	-	-	0	0	104,060,353	206,764,849	206,764,849	206,764,849	206,764,849	206,764,849	206,764,849	206,764,849	206,764,849	206,764,849
Commercial - Other	38,219,963	-	-	-	-	38,219,963	38,219,963	38,219,963	38,219,963	38,219,963	38,219,963	38,219,963	38,219,963	38,219,963	38,219,963
PA1b - Lot 1 Hospitality	37,500,000	-	-	-	-	37,500,000	37,500,000	37,500,000	37,500,000	37,500,000	37,500,000	37,500,000	37,500,000	37,500,000	37,500,000
PA1b - Lot 24 Service Stn	719,963	-	-	-	-	719,963	719,963	719,963	719,963	719,963	719,963	719,963	719,963	719,963	719,963
Industrial R&D	11,724,200	-	-	-	-	11,724,200	11,724,200	11,724,200	11,724,200	11,724,200	11,724,200	11,724,200	11,724,200	11,724,200	11,724,200
PA1b	-	-	-	-	-	0	0	0	0	0	0	0	0	0	0
PA2	11,724,200	-	-	-	-	11,724,200	11,724,200	11,724,200	11,724,200	11,724,200	11,724,200	11,724,200	11,724,200	11,724,200	11,724,200

Product Level Cumulative Retail Expenditure Estimates – by Community: ENTRADA

Use - Product	By 2031	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
RETAIL EXPENDITURE	35,000	834	5,349	10,483	15,391	22,718	27,822	30,563	32,660	34,006	34,711	34,904	35,000	35,000	35,000
Residential for Sale	24,497	834	5,349	10,261	14,141	18,174	20,234	21,835	23,107	23,985	24,497	24,497	24,497	24,497	24,497
PA5 - SFD	1,330	121	605	1,089	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330	1,330
PA6 - SFD	1,027	34	441	849	1,027	1,027	1,027	1,027	1,027	1,027	1,027	1,027	1,027	1,027	1,027
PA7 - SFD	1,530	-	369	811	1,254	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530
PA4 - SFA	1,442	679	1,357	1,442	1,442	1,442	1,442	1,442	1,442	1,442	1,442	1,442	1,442	1,442	1,442
PA8 - SFA	1,042	-	539	1,042	1,042	1,042	1,042	1,042	1,042	1,042	1,042	1,042	1,042	1,042	1,042
PA13 - SFA	1,561	-	373	1,011	1,561	1,561	1,561	1,561	1,561	1,561	1,561	1,561	1,561	1,561	1,561
PA12 - SFA	1,167	-	341	924	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167
PA11 - SFA	2,319	-	348	944	1,541	2,137	2,319	2,319	2,319	2,319	2,319	2,319	2,319	2,319	2,319
PA9 - Apt/Condo	2,092	-	481	1,058	1,635	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092	2,092
PA10 - Apt/Condo	2,256	-	496	1,091	1,686	2,256	2,256	2,256	2,256	2,256	2,256	2,256	2,256	2,256	2,256
PA15a - Loft Over Retail	1,286	-	-	-	-	353	958	1,286	1,286	1,286	1,286	1,286	1,286	1,286	1,286
PA15b - Condo on Podium	3,834	-	-	-	347	942	1,537	2,132	2,727	3,322	3,834	3,834	3,834	3,834	3,834
PA15c - Townhomes	560	-	-	-	53	560	560	560	560	560	560	560	560	560	560
PA15d - Tower Condos	3,050	-	-	-	56	734	1,412	2,090	2,768	3,050	3,050	3,050	3,050	3,050	3,050
Apartment	4,660	-	-	39	908	1,856	2,804	3,752	4,384	4,660	4,660	4,660	4,660	4,660	4,660
PA1a - Apt	2,685	-	-	39	513	987	1,461	1,935	2,409	2,685	2,685	2,685	2,685	2,685	2,685
PA15e - Apt	1,975	-	-	-	395	869	1,343	1,817	1,975	1,975	1,975	1,975	1,975	1,975	1,975
Commercial - Retail	2,511	-	-	183	342	1,426	2,511	2,511	2,511	2,511	2,511	2,511	2,511	2,511	2,511
PA14	23	-	-	23	23	23	23	23	23	23	23	23	23	23	23
PA3	319	-	-	159	319	319	319	319	319	319	319	319	319	319	319
PA1b	1,231	-	-	-	-	616	1,231	1,231	1,231	1,231	1,231	1,231	1,231	1,231	1,231
PA15f	937	-	-	-	-	469	937	937	937	937	937	937	937	937	937
Commercial - Office	3,081	-	-	-	-	1,011	2,022	2,214	2,407	2,600	2,792	2,985	3,081	3,081	3,081
PA1b - Lots 2-7	1,445	-	-	-	-	193	385	578	770	963	1,156	1,348	1,445	1,445	1,445
PA15g	1,637	-	-	-	-	818	1,637	1,637	1,637	1,637	1,637	1,637	1,637	1,637	1,637
Commercial - Other	100	-	-	-	-	100	100	100	100	100	100	100	100	100	100
PA1b - Lot 1 Hospitality	98	-	-	-	-	98	98	98	98	98	98	98	98	98	98
PA1b - Lot 24 Service Stn	2	-	-	-	-	2	2	2	2	2	2	2	2	2	2
Industrial R&D	151	-	-	-	-	151	151	151	151	151	151	151	151	151	151
PA1b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PA2	151	-	-	-	-	151	151	151	151	151	151	151	151	151	151

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Product Level Absorption Schedule, and Cumulative Population & Employee Estimates – by Community: HOMESTEAD

Use - Product	Total	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION - UNITS	5,675	-	150	697	595	733	1,093	1,034	733	421	216	3	-	-	-	-	-	-
Residential for Sale	5,488	-	150	697	595	733	906	1,034	733	421	216	3	-	-	-	-	-	-
Chiquito Det. Condos	23	-	-	-	-	-	6	17	-	-	-	-	-	-	-	-	-	-
Chiquito Customs	29	-	-	-	-	-	12	17	-	-	-	-	-	-	-	-	-	-
HS Central SFD	78	-	-	-	-	-	28	48	2	-	-	-	-	-	-	-	-	-
HS Central Customs	86	-	-	-	-	-	21	36	29	-	-	-	-	-	-	-	-	-
HS West HW-2	230	-	-	-	-	-	-	42	72	72	44	-	-	-	-	-	-	-
HS West Custom	62	-	-	-	-	-	-	21	36	5	-	-	-	-	-	-	-	-
HS West Green Court HW-1	75	-	-	-	-	-	6	69	-	-	-	-	-	-	-	-	-	-
Long Canyon SFD 75	106	-	-	16	48	42	-	-	-	-	-	-	-	-	-	-	-	-
Long Canyon SFD 80	115	-	-	16	48	48	3	-	-	-	-	-	-	-	-	-	-	-
Long Canyon SFD 50	38	-	-	16	22	-	-	-	-	-	-	-	-	-	-	-	-	-
LCS - 3 SFD5500	117	-	-	-	16	48	48	5	-	-	-	-	-	-	-	-	-	-
LCS - 4 SFD6500	127	-	-	-	16	48	48	15	-	-	-	-	-	-	-	-	-	-
Onion Fields SFD 55	96	-	-	-	-	28	48	20	-	-	-	-	-	-	-	-	-	-
Onion Fields SFD 50x90	37	-	-	-	-	37	-	-	-	-	-	-	-	-	-	-	-	-
Onion Field SFD 35	47	-	-	-	-	24	23	-	-	-	-	-	-	-	-	-	-	-
Potrero Ridge Customs	88	-	-	-	-	60	28	-	-	-	-	-	-	-	-	-	-	-
Mesas West 4 SFD Cluster MW 9-15	108	-	42	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mesas West 11 SFD Cluster MW 32	146	-	-	42	72	32	-	-	-	-	-	-	-	-	-	-	-	-
HS Central 4 Plex HC-2	120	-	-	-	-	-	60	60	-	-	-	-	-	-	-	-	-	-
HS Central 2 Story TF HC-3	351	-	-	-	-	-	60	72	72	72	72	3	-	-	-	-	-	-
HS Central 3 Story TF HC-4	144	-	-	-	-	-	24	72	48	-	-	-	-	-	-	-	-	-
HS Central E1 16 Plex	120	-	-	-	-	-	6	72	42	-	-	-	-	-	-	-	-	-
HS West 3-4 Plex	229	-	-	-	-	-	-	60	72	72	25	-	-	-	-	-	-	-
HS West Triplex HW-5	44	-	-	-	-	-	-	44	-	-	-	-	-	-	-	-	-	-
Long Canyon 3 Story	326	-	-	-	6	72	72	72	72	32	-	-	-	-	-	-	-	-
LCS 1 & 2	161	-	-	-	24	72	65	-	-	-	-	-	-	-	-	-	-	-
Onion Fields Triplex	213	-	-	-	-	-	60	72	72	9	-	-	-	-	-	-	-	-
Onion Fields 3 Story Towns	237	-	-	-	-	6	72	72	72	15	-	-	-	-	-	-	-	-
Mesas West 1A 3/4 Plex MW 1	97	-	6	72	19	-	-	-	-	-	-	-	-	-	-	-	-	-
Mesas West 3A 3/4 Plex MW 7	145	-	42	72	31	-	-	-	-	-	-	-	-	-	-	-	-	-
Mesas West 1B-10 Plex MW 2	85	-	-	60	25	-	-	-	-	-	-	-	-	-	-	-	-	-
Mesas West 3B 10 Plex MW 8 & 16	85	-	24	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mesas West 7A 10 Plex MW 17	60	-	6	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mesas West 12A 10 Plex	70	-	-	42	28	-	-	-	-	-	-	-	-	-	-	-	-	-
Mesas West 6 2/3 Duplex MW 18-21	48	-	6	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mesas West 7B 10 Plex MW 22	96	-	-	60	36	-	-	-	-	-	-	-	-	-	-	-	-	-
Mesas West 8B 2 Story TF MW 23 24	577	-	24	72	72	72	72	72	72	72	49	-	-	-	-	-	-	-
Mesas West 10 16 Plex MW 26-30	464	-	-	6	72	72	72	72	72	72	26	-	-	-	-	-	-	-
Mesas West 12B 16 Plex	208	-	-	-	60	72	72	4	-	-	-	-	-	-	-	-	-	-
Apartments	187	-	-	-	-	-	187	-	-	-	-	-	-	-	-	-	-	-
ABSORPTION - SF	1,250,000	-	-	-	-	-	1,250,000	-	-	-	-	-	-	-	-	-	-	-
Commercial - Retail	27,500	-	-	-	-	-	27,500	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	132,500	-	-	-	-	-	132,500	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	1,090,000	-	-	-	-	-	1,090,000	-	-	-	-	-	-	-	-	-	-	-
HOMESTEAD	By 2031	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CUM. POPULATION	14,777	-	390	2,172	3,764	5,798	8,814	11,304	13,158	14,221	14,770	14,777	14,777	14,777	14,777	14,777	14,777	14,777
Residential for Sale	14,332	-	390	2,172	3,764	5,798	8,169	10,859	12,713	13,776	14,325	14,332	14,332	14,332	14,332	14,332	14,332	14,332
Chiquito Det. Condos	73	-	-	-	-	-	19	73	73	73	73	73	73	73	73	73	73	73
Chiquito Customs	92	-	-	-	-	-	38	92	92	92	92	92	92	92	92	92	92	92
HS Central SFD	247	-	-	-	-	-	89	241	247	247	247	247	247	247	247	247	247	247
HS Central Customs	273	-	-	-	-	-	67	181	273	273	273	273	273	273	273	273	273	273
HS West HW-2	729	-	-	-	-	-	-	133	361	590	729	729	729	729	729	729	729	729
HS West Custom	197	-	-	-	-	-	-	67	181	197	197	197	197	197	197	197	197	197
HS West Green Court HW-1	238	-	-	-	-	-	19	238	238	238	238	238	238	238	238	238	238	238
Long Canyon SFD 75	336	-	-	51	203	336	336	336	336	336	336	336	336	336	336	336	336	336
Long Canyon SFD 80	365	-	-	51	203	355	365	365	365	365	365	365	365	365	365	365	365	365
Long Canyon SFD 50	120	-	-	51	120	120	120	120	120	120	120	120	120	120	120	120	120	120
LCS - 3 SFD5500	371	-	-	-	51	203	355	371	371	371	371	371	371	371	371	371	371	371
LCS - 4 SFD6500	403	-	-	-	51	203	355	403	403	403	403	403	403	403	403	403	403	403
Onion Fields SFD 55	304	-	-	-	-	89	241	304	304	304	304	304	304	304	304	304	304	304
Onion Fields SFD 50x90	117	-	-	-	-	117	117	117	117	117	117	117	117	117	117	117	117	117
Onion Field SFD 35	149	-	-	-	-	76	149	149	149	149	149	149	149	149	149	149	149	149
Potrero Ridge Customs	279	-	-	-	-	190	279	279	279	279	279	279	279	279	279	279	279	279
Mesas West 4 SFD Cluster MW 9-15	342	-	133	342	342	342	342	342	342	342	342	342	342	342	342	342	342	342
Mesas West 11 SFD Cluster MW 32	463	-	-	133	361	463	463	463	463	463	463	463	463	463	463	463	463	463
HS Central 4 Plex HC-2	286	-	-	-	-	143	286	286	286	286	286	286	286	286	286	286	286	286
HS Central 2 Story TF HC-3	835	-	-	-	-	143	835	835	835	835	835	835	835	835	835	835	835	835
HS Central 3 Story TF HC-4	343	-	-	-	-	57	228	343	343	343	343	343	343	343	343	343	343	343
HS Central E1 16 Plex	286	-	-	-	-	-	14	286	286	286	286	286	286	286	286	286	286	286
HS West 3-4 Plex	545	-	-	-	-	-	143	545	545	545	545	545	545	545	545	545	545	545
HS West Triplex HW-5	105	-	-	-	-	-	105	105	105	105	105	105	105	105	105	105	105	105
Long Canyon 3 Story	776	-	-	14	186	357	776	776	776	776	776	776	776	776	776	776	776	776
LCS 1 & 2	383	-	-	-	57	228	383	383	383	383	383	383	383	383	383	383	383	383
Onion Fields Triplex	507	-	-	-	-	143	507	507	507	507	507	507	507	507	507	507	507	507
Onion Fields 3 Story Towns	564	-	-	-	-	14	564	564	564	564	564	564	564	564	564	564	564	564
Mesas West 1A 3/4 Plex MW 1	231	-	14	186	231	231	231	231	231	231	231	231	231	231	231	231	231	231
Mesas West 3A 3/4 Plex MW 7	345	-	100	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
Mesas West 1B-10 Plex MW 2	202	-	-	143	202	202	202	202	202	202	202	202	202	202	202	202	202	202
Mesas West 3B 10 Plex MW 8 & 16	202	-	57	202	202	202	202	202	202	202	202	202	202	202	202	202	202	202
Mesas West 7A 10 Plex MW 17	143	-	14	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143
Mesas West 12A 10 Plex	167	-	-	100	167	167	167	167	167	167	167	167	167	167	167	167	167	167
Mesas West 6 2/3 Duplex MW 18-21	114	-	14	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114
Mesas West 7B 10 Plex MW 22	228	-	-	143	228	228	228	228	228	228	228	228	228	228	228	228	228	228
Mesas West 8B 2 Story TF MW 23 24	1,373	-	57	228	400	571	743	914	1,085	1,257	1,373	1,373	1,373	1,373	1,373	1,373	1,373	1,373
Mesas West 10 16 Plex MW 26-30	1,104	-	-	14	18													

Product Level Cumulative Assessed Values, and Cumulative Retail Expenditure Estimates – by Community: HOMESTEAD

SEPTEMBER 2006

A-7.3
Product Level Absorption Schedule – by Community: POTRERO

Use - Product	Total	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION - UNITS	8,428	-	-	-	-	-	12	320	900	1,412	1,826	1,365	904	704	570	304	111	-
Residential for Sale	7,908	-	-	-	-	-	12	320	900	1,387	1,526	1,170	904	704	570	304	111	-
PE1 140 x 100 estates	90	-	-	-	-	-	-	-	-	12	36	36	6	-	-	-	-	-
PE 2 140 x 100 estates	15	-	-	-	-	-	-	-	-	3	12	-	-	-	-	-	-	-
P 6500	224	-	-	-	-	-	-	-	-	16	48	48	48	48	16	-	-	-
P6000	257	-	-	-	-	-	-	28	48	48	48	48	37	-	-	-	-	-
P5500	250	-	-	-	-	-	-	-	28	48	48	48	48	30	-	-	-	-
P5000	225	-	-	-	-	-	-	4	48	48	48	48	29	-	-	-	-	-
P4500	392	-	-	-	-	-	-	-	16	48	48	48	48	48	48	48	40	-
P3500	276	-	-	-	-	-	-	-	16	48	48	48	48	48	20	-	-	-
A1	180	-	-	-	-	-	-	-	-	60	72	48	-	-	-	-	-	-
A2	248	-	-	-	-	-	-	24	72	72	72	8	-	-	-	-	-	-
B1	498	-	-	-	-	-	-	6	72	72	72	72	72	72	60	-	-	-
B2	540	-	-	-	-	-	-	-	60	72	72	72	72	72	72	48	-	-
C1	150	-	-	-	-	-	-	-	-	60	72	18	-	-	-	-	-	-
D	286	-	-	-	-	-	-	60	72	72	72	10	-	-	-	-	-	-
E	270	-	-	-	-	-	-	24	72	72	72	30	-	-	-	-	-	-
F	234	-	-	-	-	-	-	6	72	72	72	12	-	-	-	-	-	-
G1	324	-	-	-	-	-	-	24	72	72	72	72	12	-	-	-	-	-
G2	414	-	-	-	-	-	-	-	-	60	72	72	72	72	66	-	-	-
H1	374	-	-	-	-	-	-	-	60	72	72	72	72	26	-	-	-	-
H2	240	-	-	-	-	-	-	6	72	72	18	-	-	-	-	-	-	-
I	242	-	-	-	-	-	-	6	72	72	20	-	-	-	-	-	-	-
Lofts	500	-	-	-	-	-	-	-	42	72	72	72	72	72	72	26	-	-
Seniors 1	500	-	-	-	-	-	-	-	6	72	72	72	72	72	72	62	-	-
Seniors 2	450	-	-	-	-	-	-	-	-	42	72	72	72	72	72	48	-	-
Seniors 3	220	-	-	-	-	-	-	-	-	24	72	72	52	-	-	-	-	-
Seniors 4	509	-	-	-	-	-	-	-	-	6	72	72	72	72	72	72	71	-
Apartment	520	-	-	-	-	-	-	-	-	25	300	195	-	-	-	-	-	-
ABSORPTION - SF	1,257,000	-	-	-	-	-	-	-	628,500	628,500	-	-	-	-	-	-	-	-
Commercial - Retail	628,500	-	-	-	-	-	-	-	314,250	314,250	-	-	-	-	-	-	-	-
Commercial - Office	628,500	-	-	-	-	-	-	-	314,250	314,250	-	-	-	-	-	-	-	-

Product Level Cumulative Population & Employee Estimates – by Community: POTRERO

POTRERO	By 2031	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CUM. POPULATION	23,322	-	-	-	-	-	38	1,052	3,898	8,137	12,764	16,218	18,770	20,749	22,303	23,054	23,322	23,322
Residential for Sale	23,104	-	-	-	-	-	38	1,052	3,898	8,127	12,627	15,999	18,551	20,530	22,084	22,835	23,104	23,104
PE1 140 x 100 estates	285	-	-	-	-	-	-	-	-	38	152	266	285	285	285	285	285	285
PE 2 140 x 100 estates	48	-	-	-	-	-	-	-	-	10	48	48	48	48	48	48	48	48
P 6500	710	-	-	-	-	-	-	-	-	51	203	355	507	659	710	710	710	710
P6000	815	-	-	-	-	-	-	89	241	393	545	697	815	815	815	815	815	815
P5500	793	-	-	-	-	-	-	-	89	241	393	545	697	793	793	793	793	793
P5000	713	-	-	-	-	-	-	13	165	317	469	621	713	713	713	713	713	713
P4500	1,243	-	-	-	-	-	-	-	51	203	355	507	659	812	964	1,116	1,243	1,243
P3500	875	-	-	-	-	-	-	-	51	203	355	507	659	812	875	875	875	875
A1	571	-	-	-	-	-	-	-	-	190	418	571	571	571	571	571	571	571
A2	786	-	-	-	-	-	-	76	304	533	761	786	786	786	786	786	786	786
B1	1,579	-	-	-	-	-	-	19	247	476	704	932	1,160	1,388	1,579	1,579	1,579	1,579
B2	1,712	-	-	-	-	-	-	-	190	418	647	875	1,103	1,331	1,560	1,712	1,712	1,712
C1	476	-	-	-	-	-	-	-	-	190	418	476	476	476	476	476	476	476
D	907	-	-	-	-	-	-	190	418	647	875	907	907	907	907	907	907	907
E	856	-	-	-	-	-	-	76	304	533	761	856	856	856	856	856	856	856
F	742	-	-	-	-	-	-	19	247	476	704	742	742	742	742	742	742	742
G1	1,027	-	-	-	-	-	-	76	304	533	761	989	1,027	1,027	1,027	1,027	1,027	1,027
G2	1,312	-	-	-	-	-	-	-	-	190	418	647	875	1,103	1,312	1,312	1,312	1,312
H1	1,186	-	-	-	-	-	-	-	190	418	647	875	1,103	1,186	1,186	1,186	1,186	1,186
H2	761	-	-	-	-	-	19	247	476	704	761	761	761	761	761	761	761	761
I	767	-	-	-	-	-	19	247	476	704	767	767	767	767	767	767	767	767
Lofts	1,585	-	-	-	-	-	-	-	133	361	590	818	1,046	1,274	1,503	1,585	1,585	1,585
Seniors 1	1,000	-	-	-	-	-	-	-	12	156	300	444	588	732	876	1,000	1,000	1,000
Seniors 2	900	-	-	-	-	-	-	-	-	84	228	372	516	660	804	900	900	900
Seniors 3	440	-	-	-	-	-	-	-	-	48	192	336	440	440	440	440	440	440
Seniors 4	1,018	-	-	-	-	-	-	-	-	12	156	300	444	588	732	876	1,018	1,018
Apartment	218	-	-	-	-	-	-	-	-	11	137	218	218	218	218	218	218	218
CUM. EMPLOYEES	4,085	-	-	-	-	-	-	-	2,043	4,085	4,085	4,085	4,085	4,085	4,085	4,085	4,085	4,085
Commercial - Retail	1,571	-	-	-	-	-	-	-	786	1,571	1,571	1,571	1,571	1,571	1,571	1,571	1,571	1,571
Commercial - Office	2,514	-	-	-	-	-	-	-	1,257	2,514	2,514	2,514	2,514	2,514	2,514	2,514	2,514	2,514

A-7.3 ...Continued
Product Level Cumulative Assessed Values – by Community: POTRERO

POTRERO	By 2031	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CUM. ASSESSED VALUE	4,989,438	-	-	-	-	-	5,540	171,607	904,138	1,932,007	2,916,348	3,654,409	4,145,178	4,512,996	4,788,946	4,930,965	4,989,438	4,989,438
Residential for Sale	4,366,078,759	-	-	-	-	-	5,539,788	171,606,638	653,811,245	1,427,897,790	2,339,385,530	3,031,050,556	3,521,818,897	3,889,637,612	4,165,587,310	4,307,605,945	4,366,078,759	4,366,078,759
PE1 140 x 100 estates	215,559,480	-	-	-	-	-	-	-	-	29,515,871	117,579,354	204,190,449	215,559,480	215,559,480	215,559,480	215,559,480	215,559,480	215,559,480
PE 2 140 x 100 estates	36,725,393	-	-	-	-	-	-	-	-	7,370,899	36,725,393	36,725,393	36,725,393	36,725,393	36,725,393	36,725,393	36,725,393	36,725,393
P 6500	193,907,520	-	-	-	-	-	-	-	-	14,643,011	58,255,053	100,916,127	142,626,233	183,385,371	193,907,520	193,907,520	193,907,520	193,907,520
P6000	209,712,527	-	-	-	-	-	-	23,738,781	64,064,614	103,757,501	142,817,440	181,244,432	209,712,527	209,712,527	209,712,527	209,712,527	209,712,527	209,712,527
P5500	187,487,406	-	-	-	-	-	-	0	21,917,480	59,119,782	95,686,907	131,618,854	166,915,623	187,487,406	187,487,406	187,487,406	187,487,406	187,487,406
P5000	160,895,177	-	-	-	-	-	-	2,981,491	38,704,869	73,774,135	108,189,288	141,950,329	160,895,177	160,895,177	160,895,177	160,895,177	160,895,177	160,895,177
P4500	249,385,883	-	-	-	-	-	-	-	10,871,570	43,301,849	75,178,838	106,502,536	137,272,943	167,490,060	197,153,887	226,264,422	249,385,883	249,385,883
P3500	161,326,437	-	-	-	-	-	-	-	9,836,285	39,181,424	68,035,418	96,398,265	124,269,968	151,650,524	161,326,437	161,326,437	161,326,437	161,326,437
A1	109,006,572	-	-	-	-	-	-	-	-	38,515,899	82,690,876	109,006,572	109,006,572	109,006,572	109,006,572	109,006,572	109,006,572	109,006,572
A2	164,037,244	-	-	-	-	-	-	16,389,935	65,317,677	113,519,224	160,994,578	164,037,244	164,037,244	164,037,244	164,037,244	164,037,244	164,037,244	164,037,244
B1	257,774,285	-	-	-	-	-	-	3,257,393	42,297,497	80,754,313	118,627,841	155,918,081	192,625,032	228,748,695	257,774,285	257,774,285	257,774,285	257,774,285
B2	245,677,639	-	-	-	-	-	-	-	29,222,079	63,750,652	97,633,719	130,871,280	163,463,336	195,409,887	226,710,931	245,677,639	245,677,639	245,677,639
C1	83,776,340	-	-	-	-	-	-	-	-	33,964,972	74,367,910	83,776,340	83,776,340	83,776,340	83,776,340	83,776,340	83,776,340	83,776,340
D	134,479,900	-	-	-	-	-	-	29,087,593	63,620,297	97,706,113	131,345,040	134,479,900	134,479,900	134,479,900	134,479,900	134,479,900	134,479,900	134,479,900
E	109,107,387	-	-	-	-	-	-	9,950,899	39,674,494	69,010,786	97,959,775	109,107,387	109,107,387	109,107,387	109,107,387	109,107,387	109,107,387	109,107,387
F	89,102,952	-	-	-	-	-	-	2,337,104	30,355,455	58,051,053	85,423,899	89,102,952	89,102,952	89,102,952	89,102,952	89,102,952	89,102,952	89,102,952
G1	156,782,163	-	-	-	-	-	-	11,892,416	47,462,079	82,708,989	117,633,146	152,234,550	156,782,163	156,782,163	156,782,163	156,782,163	156,782,163	156,782,163
G2	195,189,839	-	-	-	-	-	-	-	-	28,951,039	63,423,326	97,572,859	131,399,640	195,189,839	195,189,839	195,189,839	195,189,839	195,189,839
H1	166,927,302	-	-	-	-	-	-	-	-	60,015,812	92,387,612	124,495,342	156,339,001	166,927,302	166,927,302	166,927,302	166,927,302	166,927,302
H2	111,192,050	-	-	-	-	-	-	2,825,794	36,711,110	70,305,948	103,610,309	111,192,050	111,192,050	111,192,050	111,192,050	111,192,050	111,192,050	111,192,050
I	107,791,983	-	-	-	-	-	-	2,713,994	35,259,918	67,541,771	99,559,553	107,791,983	107,791,983	107,791,983	107,791,983	107,791,983	107,791,983	107,791,983
Lofts	262,196,650	-	-	-	-	-	-	-	-	22,636,555	61,272,632	99,618,232	137,673,354	175,437,998	202,196,650	262,196,650	262,196,650	262,196,650
Senoirs 1	211,870,657	-	-	-	-	-	-	-	-	2,602,635	33,814,888	64,794,758	95,542,247	126,057,354	156,340,078	186,390,421	211,870,657	211,870,657
Senoirs 2	201,914,241	-	-	-	-	-	-	-	-	19,514,073	52,740,843	85,580,309	118,032,472	150,097,331	181,774,887	201,914,241	201,914,241	201,914,241
Senoirs 3	83,274,723	-	-	-	-	-	-	-	-	9,349,546	37,195,730	64,434,551	83,274,723	83,274,723	83,274,723	83,274,723	83,274,723	83,274,723
Senoirs 4	260,977,011	-	-	-	-	-	-	-	-	3,163,466	41,096,522	78,687,169	115,935,405	152,841,232	189,404,650	225,626,658	260,977,011	260,977,011
Apartments	125,327,635	-	-	-	-	-	-	-	-	6,077,588	78,931,054	125,327,635	125,327,635	125,327,635	125,327,635	125,327,635	125,327,635	125,327,635
Commercial - Retail	219,139,689	-	-	-	-	-	-	-	-	110,225,436	219,139,689	219,139,689	219,139,689	219,139,689	219,139,689	219,139,689	219,139,689	219,139,689
Commercial - Office	278,891,450	-	-	-	-	-	-	-	-	140,101,317	278,891,450	278,891,450	278,891,450	278,891,450	278,891,450	278,891,450	278,891,450	278,891,450

Product Level Cumulative Retail Expenditure Estimates – by Community: POTRERO

POTRERO	By 2031	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
RETAIL EXPENDITURE (\$ 000)	78,355	-	-	-	-	-	-	2,891	12,259	26,390	42,747	55,046	63,200	69,512	74,602	77,299	78,355	78,355
Residential for Sale	72,250	-	-	-	-	-	100	2,891	10,918	23,543	37,925	48,941	57,095	63,407	68,496	71,194	72,250	72,250
PE1 140 x 100 estates	2,070	-	-	-	-	-	-	-	-	276	1,104	1,932	2,070	2,070	2,070	2,070	2,070	2,070
PE 2 140 x 100 estates	345	-	-	-	-	-	-	-	-	69	345	345	345	345	345	345	345	345
P 6500	2,251	-	-	-	-	-	-	-	-	161	643	1,126	1,608	2,090	2,251	2,251	2,251	2,251
P6000	2,383	-	-	-	-	-	-	260	705	1,150	1,595	2,040	2,383	2,383	2,383	2,383	2,383	2,383
P5500	2,147	-	-	-	-	-	-	-	240	653	1,065	1,477	1,889	2,147	2,147	2,147	2,147	2,147
P5000	2,438	-	-	-	-	-	-	43	563	1,083	1,603	2,123	2,438	2,438	2,438	2,438	2,438	2,438
P4500	4,116	-	-	-	-	-	-	-	168	672	1,176	1,680	2,184	2,688	3,192	3,696	4,116	4,116
P3500	2,628	-	-	-	-	-	-	-	152	609	1,066	1,523	1,980	2,437	2,628	2,628	2,628	2,628
A1	1,850	-	-	-	-	-	-	-	-	617	1,357	1,850	1,850	1,850	1,850	1,850	1,850	1,850
A2	2,611	-	-	-	-	-	-	253	1,011	1,769	2,527	2,611	2,611	2,611	2,611	2,611	2,611	2,611
B1	4,615	-	-	-	-	-	-	56	723	1,390	2,057	2,724	3,391	4,059	4,615	4,615	4,615	4,615
B2	4,773	-	-	-	-	-	-	-	530	1,167	1,803	2,440	3,076	3,712	4,349	4,773	4,773	4,773
C1	1,386	-	-	-	-	-	-	-	-	554	1,220	1,386	1,386	1,386	1,386	1,386	1,386	1,386
D	2,503	-	-	-	-	-	-	525	1,155	1,785	2,416	2,503	2,503	2,503	2,503	2,503	2,503	2,503
E	2,231	-	-	-	-	-	-	198	793	1,388	1,983	2,231	2,231	2,231	2,231	2,231	2,231	2,231
F	1,817	-	-	-	-	-	-	47	606	1,165	1,724	1,817	1,817	1,817	1,817	1,817	1,817	1,817
G1	2,886	-	-	-	-	-	-	214	855	1,497	2,138	2,780	2,886	2,886	2,886	2,886	2,886	2,886
G2	3,595	-	-	-	-	-	-	-	-	521	1,146	1,771	2,396	3,021	3,595	3,595	3,595	3,595
H1	3,071	-	-	-	-	-	-	-	493	1,084	1,675	2,267	2,858	3,071	3,071	3,071	3,071	3,071
H2	2,034	-	-	-	-	-	51	661	1,271	1,881	2,034	2,034	2,034	2,034	2,034	2,034	2,034	2,034
I	1,970	-	-	-	-	-	49	635	1,221	1,808	1,970	1,970	1,970	1,970	1,970	1,970	1,970	1,970
Lofts	4,567	-	-	-	-	-	-	-	384	1,041	1,699	2,357	3,015	3,672	4,330	4,567	4,567	4,567
Senoirs 1	3,906	-	-	-	-	-	-	-	47	609	1,172	1,734	2,297	2,859	3,421	3,906	3,906	3,906
Senoirs 2	3,774	-	-	-	-	-	-	-	-	352	956	1,560	2,164	2,767	3,371	3,774	3,774	3,774
Senoirs 3	1,725	-	-	-	-	-	-	-	-	188	753	1,317	1,725	1,725	1,725	1,725	1,725	1,725
Senoirs 4	4,558	-	-	-	-	-	-	-	-	54	698	1,343	1,988	2,633	3,277	3,922	4,558	4,558
Apartments	3,423	-	-	-	-	-	-	-	-	165	2,139	3,423	3,423	3,423	3,423	3,423	3,423	3,423
Commercial - Retail	1,032	-	-	-	-	-	-	-	516	1,032	1,032	1,032	1,032	1,032	1,032	1,032	1,032	1,032
Commercial - Office	1,651	-	-	-	-	-	-	-	825	1,651	1,651	1,651	1,651	1,651	1,651	1,651	1,651	1,651

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Product Level Absorption Schedule, and Cumulative Population & Employee Estimates – by Community: MISSION VILLAGE

Use - Product	Total	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION - UNITS	5,331	72	708	995	1,826	1,218	380	76	56	-	-	-	-	-	-	-	-	-
Residential for Sale	4,285	72	538	995	1,216	952	380	76	56	-	-	-	-	-	-	-	-	-
A2 SFD	123	-	40	48	35	-	-	-	-	-	-	-	-	-	-	-	-	-
A7 SFD	95	-	4	48	43	-	-	-	-	-	-	-	-	-	-	-	-	-
A8 Custom	73	-	12	36	25	-	-	-	-	-	-	-	-	-	-	-	-	-
SeniorsArea C (SFD)	212	-	16	48	48	48	48	4	-	-	-	-	-	-	-	-	-	-
A3a Duplex	80	24	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A3b Towns-Flats	168	-	60	72	36	-	-	-	-	-	-	-	-	-	-	-	-	-
A4 Condo	264	-	24	72	72	72	24	-	-	-	-	-	-	-	-	-	-	-
A5 3/4 Plex Towns	153	-	60	72	21	-	-	-	-	-	-	-	-	-	-	-	-	-
A6 3 Story Towns	216	-	24	72	72	48	-	-	-	-	-	-	-	-	-	-	-	-
A9 Duplex	60	-	6	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A10 Duplex	80	-	48	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B1 Duplex	92	24	68	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B2 3 Story Town	186	24	72	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-
B6 Towns/Flats	180	-	42	72	66	-	-	-	-	-	-	-	-	-	-	-	-	-
B7	230	-	42	72	72	44	-	-	-	-	-	-	-	-	-	-	-	-
Senior C6 Flats	440	-	24	72	72	72	72	56	-	-	-	-	-	-	-	-	-	-
Senior Area C Duplex	194	-	24	72	26	-	-	-	-	-	-	-	-	-	-	-	-	-
D2 Towns 2/3 Story	156	-	-	42	72	42	-	-	-	-	-	-	-	-	-	-	-	-
F2a Live/Work 3 Story	15	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F2b Condo 4/5 Story	242	-	-	-	80	66	-	-	-	-	-	-	-	-	-	-	-	-
F3a Live/Work 3 Story	15	-	-	6	9	-	-	-	-	-	-	-	-	-	-	-	-	-
F3b Condo 4/5 Story	217	-	-	-	80	96	41	-	-	-	-	-	-	-	-	-	-	-
F5a Condo 4/5 Story	140	-	-	-	56	84	-	-	-	-	-	-	-	-	-	-	-	-
F5b Condo 4/5 Story	171	-	-	-	32	96	43	-	-	-	-	-	-	-	-	-	-	-
F6a Condo 4 Story	76	-	-	-	32	44	-	-	-	-	-	-	-	-	-	-	-	-
F6b Condo 4 Story	81	-	-	-	21	60	-	-	-	-	-	-	-	-	-	-	-	-
F7 Condo 3 Story	138	-	-	56	82	-	-	-	-	-	-	-	-	-	-	-	-	-
F8a Condo 3/4 Story	74	-	-	32	42	-	-	-	-	-	-	-	-	-	-	-	-	-
F8b Condo 3/4 Story	114	-	-	32	82	-	-	-	-	-	-	-	-	-	-	-	-	-
Apartments	1,046	-	170	-	610	266	-	-	-	-	-	-	-	-	-	-	-	-
B3 -Market Rate	170	-	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D1 Low & Mod	314	-	-	-	175	139	-	-	-	-	-	-	-	-	-	-	-	-
F9 -Low	188	-	-	-	175	13	-	-	-	-	-	-	-	-	-	-	-	-
F4 -Market Rate	214	-	-	-	100	114	-	-	-	-	-	-	-	-	-	-	-	-
F1a -Market Rate	15	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-
F1b -Market Rate	145	-	-	-	145	-	-	-	-	-	-	-	-	-	-	-	-	-
ABSORPTION - SF	1,399,000	-	-	-	113,650	134,250	263,780	196,830	196,830	196,830	196,830	-	-	-	-	-	-	-
Commercial - Retail	314,850	-	-	-	113,650	134,250	66,950	-	-	-	-	-	-	-	-	-	-	-
F10	97,650	-	-	-	97,650	-	-	-	-	-	-	-	-	-	-	-	-	-
F11	73,500	-	-	-	-	73,500	-	-	-	-	-	-	-	-	-	-	-	-
F5B/F6B	16,000	-	-	-	16,000	-	-	-	-	-	-	-	-	-	-	-	-	-
F14	121,500	-	-	-	-	60,750	60,750	-	-	-	-	-	-	-	-	-	-	-
E2	6,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	984,150	-	-	-	-	-	196,830	196,830	196,830	196,830	196,830	-	-	-	-	-	-	-
MISSION VILLAGE	By 2031	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CUM. POPULATION	12,993	190	1,979	4,435	8,920	11,852	12,729	12,881	12,993	12,993	12,993	12,993	12,993	12,993	12,993	12,993	12,993	12,993
Residential for Sale	10,378	190	1,554	4,010	6,970	9,237	10,114	10,266	10,378	10,378	10,378	10,378	10,378	10,378	10,378	10,378	10,378	10,378
A2 SFD	390	-	127	279	390	390	390	390	390	390	390	390	390	390	390	390	390	390
A7 SFD	301	-	13	165	301	301	301	301	301	301	301	301	301	301	301	301	301	301
A8 Custom	231	-	38	152	231	231	231	231	231	231	231	231	231	231	231	231	231	231
SeniorsArea C (SFD)	424	-	32	128	224	320	416	424	424	424	424	424	424	424	424	424	424	424
A3a Duplex	76	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254	254
A3b Towns-Flats	400	-	143	314	400	400	400	400	400	400	400	400	400	400	400	400	400	400
A4 Condo	837	-	76	304	533	761	837	837	837	837	837	837	837	837	837	837	837	837
A5 3/4 Plex Towns	364	-	143	314	364	364	364	364	364	364	364	364	364	364	364	364	364	364
A6 3 Story Towns	514	-	57	228	400	514	514	514	514	514	514	514	514	514	514	514	514	514
A9 Duplex	143	-	14	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143
A10 Duplex	190	-	114	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190
B1 Duplex	219	57	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219
B2 3 Story Town	443	57	228	400	443	443	443	443	443	443	443	443	443	443	443	443	443	443
B6 Towns/Flats	428	-	100	271	428	428	428	428	428	428	428	428	428	428	428	428	428	428
B7	547	-	100	271	443	547	547	547	547	547	547	547	547	547	547	547	547	547
Senior C6 Flats	880	-	48	192	336	388	388	388	388	388	388	388	388	388	388	388	388	388
Senior Area C Duplex	388	-	48	192	336	388	388	388	388	388	388	388	388	388	388	388	388	388
D2 Towns 2/3 Story	371	-	-	-	100	271	371	371	371	371	371	371	371	371	371	371	371	371
F2a Live/Work 3 Story	36	-	-	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
F2b Condo 4/5 Story	576	-	-	-	190	419	576	576	576	576	576	576	576	576	576	576	576	576
F3a Live/Work 3 Story	36	-	-	14	36	36	36	36	36	36	36	36	36	36	36	36	36	36
F3b Condo 4/5 Story	516	-	-	-	190	419	516	516	516	516	516	516	516	516	516	516	516	516
F5a Condo 4/5 Story	333	-	-	-	133	333	333	333	333	333	333	333	333	333	333	333	333	333
F5b Condo 4/5 Story	407	-	-	-	76	305	407	407	407	407	407	407	407	407	407	407	407	407
F6a Condo 4 Story	181	-	-	-	76	181	181	181	181	181	181	181	181	181	181	181	181	181
F6b Condo 4 Story	193	-	-	-	50	193	193	193	193	193	193	193	193	193	193	193	193	193
F7 Condo 3 Story	328	-	-	133	328	328	328	328	328	328	328	328	328	328	328	328	328	328
F8a Condo 3/4 Story	176	-	-	76	176	176	176	176	176	176	176	176	176	176	176	176	176	176
F8b Condo 3/4 Story	271	-	-	76	271	271	271	271	271	271	271	271	271	271	271	271	271	271
Apartments	2,615	-	425	425	1,950	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615
B3 -Market Rate	425	-	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425
D1 Low & Mod	785	-	-	-	438	785	785	785	785	785	785	785	785	785	785	785	785	785
F9 -Low	470	-	-	-	438	470	470	470	470	470	470	470	470	470	470	470	470	470
F4 -Market Rate	535	-	-	-	250	535	535	535	535	535	535	535	535	535	535	535	535	535
F1a -Market Rate	38	-	-	-	38	38	38	38	38	38	38	38	38	38	38	38	38	38
F1b -Market Rate	363	-	-	-	363	363</												

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Product Level Cumulative Assessed Values, and Cumulative Retail Expenditure Estimates – by Community: MISSION VILLAGE

MISSION VILLAGE	By 2031	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CUM. ASSESSED VALUE	58,479,488	34,333	384,048	983,979	1,818,996	2,378,980	2,652,923	2,754,958	2,848,246	2,914,106	2,979,209	2,979,209	2,979,209	2,979,209	2,979,209	2,979,209	2,979,209	2,979,209
Residential for Sale	2,274,691,694	34,333,107	340,486,962	940,419,454	1,591,524,689	2,033,750,622	2,213,363,135	2,246,021	2,274,691,694	2,274,691,694	2,274,691,694	2,274,691,694	2,274,691,694	2,274,691,694	2,274,691,694	2,274,691,694	2,274,691,694	2,274,691,694
A2 SFD	99,400,839	-	72,009,846	99,400,839	99,400,839	99,400,839	99,400,839	99,400,839	99,400,839	99,400,839	99,400,839	99,400,839	99,400,839	99,400,839	99,400,839	99,400,839	99,400,839	99,400,839
A7 SFD	99,636,998	-	4,241,510	55,061,138	99,636,998	99,636,998	99,636,998	99,636,998	99,636,998	99,636,998	99,636,998	99,636,998	99,636,998	99,636,998	99,636,998	99,636,998	99,636,998	99,636,998
A8 Custom	177,406,275	-	29,589,138	117,837,688	177,406,275	177,406,275	177,406,275	177,406,275	177,406,275	177,406,275	177,406,275	177,406,275	177,406,275	177,406,275	177,406,275	177,406,275	177,406,275	177,406,275
SeniorsArea C (SFD)	120,585,365	-	9,648,609	38,387,043	66,503,303	120,585,365	120,585,365	120,585,365	120,585,365	120,585,365	120,585,365	120,585,365	120,585,365	120,585,365	120,585,365	120,585,365	120,585,365	120,585,365
A3a Duplex	39,924,156	12,024,036	39,924,156	39,924,156	39,924,156	39,924,156	39,924,156	39,924,156	39,924,156	39,924,156	39,924,156	39,924,156	39,924,156	39,924,156	39,924,156	39,924,156	39,924,156	39,924,156
A3a Towns-Flats	77,892,872	-	28,134,145	61,919,265	77,892,872	77,892,872	77,892,872	77,892,872	77,892,872	77,892,872	77,892,872	77,892,872	77,892,872	77,892,872	77,892,872	77,892,872	77,892,872	77,892,872
A4 Condo	108,732,649	-	10,054,929	40,134,644	69,959,145	99,528,433	108,732,649	108,732,649	108,732,649	108,732,649	108,732,649	108,732,649	108,732,649	108,732,649	108,732,649	108,732,649	108,732,649	108,732,649
A5 3/4 Plex Towns	75,363,096	-	29,952,538	65,578,123	75,363,096	75,363,096	75,363,096	75,363,096	75,363,096	75,363,096	75,363,096	75,363,096	75,363,096	75,363,096	75,363,096	75,363,096	75,363,096	75,363,096
A6 3 Story Towns	107,903,164	-	12,125,674	48,400,372	84,368,093	107,903,164	107,903,164	107,903,164	107,903,164	107,903,164	107,903,164	107,903,164	107,903,164	107,903,164	107,903,164	107,903,164	107,903,164	107,903,164
A9 Duplex	33,047,149	-	3,309,468	33,047,149	33,047,149	33,047,149	33,047,149	33,047,149	33,047,149	33,047,149	33,047,149	33,047,149	33,047,149	33,047,149	33,047,149	33,047,149	33,047,149	33,047,149
A10 Duplex	45,501,246	-	27,511,967	45,501,246	45,501,246	45,501,246	45,501,246	45,501,246	45,501,246	45,501,246	45,501,246	45,501,246	45,501,246	45,501,246	45,501,246	45,501,246	45,501,246	45,501,246
B1 Duplex	47,163,306	12,347,443	47,163,306	47,163,306	47,163,306	47,163,306	47,163,306	47,163,306	47,163,306	47,163,306	47,163,306	47,163,306	47,163,306	47,163,306	47,163,306	47,163,306	47,163,306	47,163,306
B2 3 Story Town	75,926,159	9,961,628	39,740,141	69,199,539	75,926,159	75,926,159	75,926,159	75,926,159	75,926,159	75,926,159	75,926,159	75,926,159	75,926,159	75,926,159	75,926,159	75,926,159	75,926,159	75,926,159
B6 Towns/Flats	73,898,579	-	73,898,579	73,898,579	73,898,579	73,898,579	73,898,579	73,898,579	73,898,579	73,898,579	73,898,579	73,898,579	73,898,579	73,898,579	73,898,579	73,898,579	73,898,579	73,898,579
B7	115,847,662	-	-	21,250,580	57,615,726	93,870,438	115,847,662	115,847,662	115,847,662	115,847,662	115,847,662	115,847,662	115,847,662	115,847,662	115,847,662	115,847,662	115,847,662	115,847,662
Senior C6 Flats	215,997,466	-	12,021,713	48,000,567	83,720,561	119,181,696	156,383,971	189,327,386	215,997,466	215,997,466	215,997,466	215,997,466	215,997,466	215,997,466	215,997,466	215,997,466	215,997,466	215,997,466
Senior Area C Duplex	109,567,413	-	14,023,938	55,779,688	96,587,251	109,567,413	109,567,413	109,567,413	109,567,413	109,567,413	109,567,413	109,567,413	109,567,413	109,567,413	109,567,413	109,567,413	109,567,413	109,567,413
D2 Towns 2/3 Story	65,717,118	-	-	17,845,035	48,284,559	65,717,118	65,717,118	65,717,118	65,717,118	65,717,118	65,717,118	65,717,118	65,717,118	65,717,118	65,717,118	65,717,118	65,717,118	65,717,118
F2a Live/Work 3 Story	10,042,050	-	-	10,042,050	10,042,050	10,042,050	10,042,050	10,042,050	10,042,050	10,042,050	10,042,050	10,042,050	10,042,050	10,042,050	10,042,050	10,042,050	10,042,050	10,042,050
F2b Condo 4/5 Story	115,303,347	-	-	10,020,698	83,962,235	115,303,347	115,303,347	115,303,347	115,303,347	115,303,347	115,303,347	115,303,347	115,303,347	115,303,347	115,303,347	115,303,347	115,303,347	115,303,347
F3a Live/Work 3 Story	10,029,870	-	-	4,016,820	10,029,870	10,029,870	10,029,870	10,029,870	10,029,870	10,029,870	10,029,870	10,029,870	10,029,870	10,029,870	10,029,870	10,029,870	10,029,870	10,029,870
F3b Condo 4/5 Story	106,937,477	-	-	39,540,884	86,890,829	106,937,477	106,937,477	106,937,477	106,937,477	106,937,477	106,937,477	106,937,477	106,937,477	106,937,477	106,937,477	106,937,477	106,937,477	106,937,477
F3c Condo 4/5 Story	63,282,048	-	-	25,356,585	63,282,048	63,282,048	63,282,048	63,282,048	63,282,048	63,282,048	63,282,048	63,282,048	63,282,048	63,282,048	63,282,048	63,282,048	63,282,048	63,282,048
F5b Condo 4/5 Story	70,058,855	-	-	13,138,258	52,523,289	70,058,855	70,058,855	70,058,855	70,058,855	70,058,855	70,058,855	70,058,855	70,058,855	70,058,855	70,058,855	70,058,855	70,058,855	70,058,855
F6a Condo 4 Story	35,546,921	-	-	14,993,458	35,546,921	35,546,921	35,546,921	35,546,921	35,546,921	35,546,921	35,546,921	35,546,921	35,546,921	35,546,921	35,546,921	35,546,921	35,546,921	35,546,921
F7b Condo 4 Story	38,558,360	-	-	10,007,295	38,558,360	38,558,360	38,558,360	38,558,360	38,558,360	38,558,360	38,558,360	38,558,360	38,558,360	38,558,360	38,558,360	38,558,360	38,558,360	38,558,360
F7 Condo 3 Story	58,909,570	-	-	23,931,505	58,909,570	58,909,570	58,909,570	58,909,570	58,909,570	58,909,570	58,909,570	58,909,570	58,909,570	58,909,570	58,909,570	58,909,570	58,909,570	58,909,570
F8a Condo 3/4 Story	30,830,231	-	-	13,359,768	30,830,231	30,830,231	30,830,231	30,830,231	30,830,231	30,830,231	30,830,231	30,830,231	30,830,231	30,830,231	30,830,231	30,830,231	30,830,231	30,830,231
F8b Condo 3/4 Story	45,681,452	-	-	12,835,387	45,681,452	45,681,452	45,681,452	45,681,452	45,681,452	45,681,452	45,681,452	45,681,452	45,681,452	45,681,452	45,681,452	45,681,452	45,681,452	45,681,452
Apartments	235,163,445	-	43,559,513	173,570,192	235,163,445	235,163,445	235,163,445	235,163,445	235,163,445	235,163,445	235,163,445	235,163,445	235,163,445	235,163,445	235,163,445	235,163,445	235,163,445	235,163,445
B3 -Market Rate	43,559,513	-	43,559,513	43,559,513	43,559,513	43,559,513	43,559,513	43,559,513	43,559,513	43,559,513	43,559,513	43,559,513	43,559,513	43,559,513	43,559,513	43,559,513	43,559,513	43,559,513
D1 Low & Mod	70,384,374	-	-	39,478,408	70,384,374	70,384,374	70,384,374	70,384,374	70,384,374	70,384,374	70,384,374	70,384,374	70,384,374	70,384,374	70,384,374	70,384,374	70,384,374	70,384,374
F9 -Low	25,221,219	-	-	23,708,868	25,221,219	25,221,219	25,221,219	25,221,219	25,221,219	25,221,219	25,221,219	25,221,219	25,221,219	25,221,219	25,221,219	25,221,219	25,221,219	25,221,219
F4 -Market Rate	54,891,800	-	-	25,716,865	54,891,800	54,891,800	54,891,800	54,891,800	54,891,800	54,891,800	54,891,800	54,891,800	54,891,800	54,891,800	54,891,800	54,891,800	54,891,800	54,891,800
F1a -Market Rate	3,848,423	-	-	3,848,423	3,848,423	3,848,423	3,848,423	3,848,423	3,848,423	3,848,423	3,848,423	3,848,423	3,848,423	3,848,423	3,848,423	3,848,423	3,848,423	3,848,423
F1b -Market Rate	37,258,115	-	-	37,258,115	37,258,115	37,258,115	37,258,115	37,258,115	37,258,115	37,258,115	37,258,115	37,258,115	37,258,115	37,258,115	37,258,115	37,258,115	37,258,115	37,258,115
Commercial - Retail	136,264,100	-	-	53,901,511	110,065,437	136,264,100	136,264,100	136,264,100	136,264,100	136,264,100	136,264,100	136,264,100	136,264,100	136,264,100	136,264,100	136,264,100	136,264,100	136,264,100
F10	44,193,779	-	-	-	44,193,779	44,193,779	44,193,779	44,193,779	44,193,779	44,193,779	44,193,779	44,193,779	44,193,779	44,193,779	44,193,779	44,193,779	44,193,779	44,193,779
F11	33,292,045	-	-	-	33,292,045	33,292,045	33,292,045	33,292,045	33,292,045	33,292,045	33,292,045	33,292,045	33,292,045	33,292,045	33,292,045	33,292,045	33,292,045	33,292,045
F5B/F6B	9,707,732	-	-	-	9,707,732	9,707,732	9,707,732	9,707,732	9,707,732	9,707,732	9,707,732	9,707,732	9,707,732	9,707,732	9,707,732	9,707,732	9,707,732	9,707,732
F14	45,513,528	-	-	-	22,871,880	45,513,528	45,513,528	45,513,528	45,5									

A-7.5

Product Level Absorption Schedule, and Cumulative Population & Employee Estimates – by Community: LEGACY

Use - Product	Total	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION - UNITS	3,480	-	-	48	390	1,151	1,127	425	258	81	-	-	-	-	-	-	-
Residential for Sale	2,741	-	-	48	360	1,001	917	281	114	20	-	-	-	-	-	-	-
A1 - Triplex	108	-	-	-	42	66	-	-	-	-	-	-	-	-	-	-	-
A2 - 45x100	98	-	-	28	48	22	-	-	-	-	-	-	-	-	-	-	-
A3 - Triplex	45	-	-	-	-	42	3	-	-	-	-	-	-	-	-	-	-
A4 - 55x110	108	-	-	-	-	40	48	20	-	-	-	-	-	-	-	-	-
A5 Luxury Flats	300	-	-	-	42	72	72	42	-	-	-	-	-	-	-	-	-
A6 - 45x100	38	-	-	-	16	22	-	-	-	-	-	-	-	-	-	-	-
A7 - 60x110	92	-	-	-	16	48	28	-	-	-	-	-	-	-	-	-	-
A8 - 50x105	116	-	-	-	40	48	28	-	-	-	-	-	-	-	-	-	-
A9 - 50x105	138	-	-	16	48	48	26	-	-	-	-	-	-	-	-	-	-
A10 - 55x110	109	-	-	4	48	48	9	-	-	-	-	-	-	-	-	-	-
A11 - 60x110	98	-	-	-	4	48	46	-	-	-	-	-	-	-	-	-	-
A12 - 45x100	65	-	-	-	-	60	5	-	-	-	-	-	-	-	-	-	-
A13 - Duplex	44	-	-	-	44	-	-	-	-	-	-	-	-	-	-	-	-
B3 - Condos	72	-	-	-	-	60	12	-	-	-	-	-	-	-	-	-	-
B4 - Condos	88	-	-	-	-	60	28	-	-	-	-	-	-	-	-	-	-
B6 - Condos	278	-	-	-	-	42	72	72	72	20	-	-	-	-	-	-	-
B8 Temp School	13	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-
B9 - Condos	74	-	-	-	-	24	50	-	-	-	-	-	-	-	-	-	-
B10 - Condos	74	-	-	-	-	6	68	-	-	-	-	-	-	-	-	-	-
B11 - Condos	104	-	-	-	6	72	26	-	-	-	-	-	-	-	-	-	-
B12 - Condos	160	-	-	-	6	72	72	10	-	-	-	-	-	-	-	-	-
C1a - 45x100	82	-	-	-	-	28	48	6	-	-	-	-	-	-	-	-	-
C1b - 45x100	82	-	-	-	-	16	48	18	-	-	-	-	-	-	-	-	-
C2a - 50x100	87	-	-	-	-	4	48	35	-	-	-	-	-	-	-	-	-
C2b - 45x100	52	-	-	-	-	16	36	-	-	-	-	-	-	-	-	-	-
C3 - 60x100	77	-	-	-	-	4	48	25	-	-	-	-	-	-	-	-	-
C4 - 60x100	68	-	-	-	-	4	48	16	-	-	-	-	-	-	-	-	-
D - SFR	71	-	-	-	-	16	48	7	-	-	-	-	-	-	-	-	-
Apartments	739	-	-	-	30	150	210	144	144	61	-	-	-	-	-	-	-
B5 - Apts	144	-	-	-	6	72	66	-	-	-	-	-	-	-	-	-	-
B7 - Apts	323	-	-	-	24	72	72	72	72	11	-	-	-	-	-	-	-
C5 - Apts	272	-	-	-	-	6	72	72	72	50	-	-	-	-	-	-	-
ABSORPTION - SF	486,000	-	-	-	-	328,000	158,000	-	-	-	-	-	-	-	-	-	-
Commercial - Retail	170,000	-	-	-	-	170,000	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	316,000	-	-	-	-	158,000	158,000	-	-	-	-	-	-	-	-	-	-
LEGACY	By 2031	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CUM. POPULATION	10,144	-	-	152	1,267	4,673	8,046	9,240	9,928	10,144	10,144	10,144	10,144	10,144	10,144	10,144	10,144
Residential for Sale	8,296	-	-	152	1,192	4,223	7,071	7,905	8,233	8,296	8,296	8,296	8,296	8,296	8,296	8,296	8,296
A1 - Triplex	257	-	-	-	100	257	257	257	257	257	257	257	257	257	257	257	257
A2 - 45x100	311	-	-	89	241	311	311	311	311	311	311	311	311	311	311	311	311
A3 - Triplex	107	-	-	-	-	100	107	107	107	107	107	107	107	107	107	107	107
A7 - 60x110	342	-	-	-	-	127	279	342	342	342	342	342	342	342	342	342	342
A8 - 50x105	714	-	-	-	100	271	443	614	714	714	714	714	714	714	714	714	714
A9 - 50x105	120	-	-	-	51	120	120	120	120	120	120	120	120	120	120	120	120
A10 - 55x110	292	-	-	-	51	203	292	292	292	292	292	292	292	292	292	292	292
A11 - 60x110	368	-	-	-	127	279	368	368	368	368	368	368	368	368	368	368	368
A12 - 45x100	437	-	-	51	203	355	437	437	437	437	437	437	437	437	437	437	437
A13 - Duplex	346	-	-	13	165	317	346	346	346	346	346	346	346	346	346	346	346
B3 - Condos	311	-	-	-	13	165	311	311	311	311	311	311	311	311	311	311	311
B4 - Condos	206	-	-	-	-	190	206	206	206	206	206	206	206	206	206	206	206
B5 - Apts	105	-	-	-	105	105	105	105	105	105	105	105	105	105	105	105	105
B6 - Condos	228	-	-	-	-	190	228	228	228	228	228	228	228	228	228	228	228
B7 - Apts	279	-	-	-	-	190	279	279	279	279	279	279	279	279	279	279	279
B8 Temp School	881	-	-	-	-	133	361	590	818	881	881	881	881	881	881	881	881
B9 - Condos	41	-	-	-	-	41	41	41	41	41	41	41	41	41	41	41	41
B10 - Condos	235	-	-	-	-	76	235	235	235	235	235	235	235	235	235	235	235
B11 - Condos	235	-	-	-	-	19	235	235	235	235	235	235	235	235	235	235	235
B12 - Condos	330	-	-	-	19	247	330	330	330	330	330	330	330	330	330	330	330
C1a - 45x100	507	-	-	-	19	247	476	507	507	507	507	507	507	507	507	507	507
C1b - 45x100	260	-	-	-	-	89	241	260	260	260	260	260	260	260	260	260	260
C2a - 50x100	260	-	-	-	-	51	203	260	260	260	260	260	260	260	260	260	260
C2b - 45x100	276	-	-	-	-	13	165	276	276	276	276	276	276	276	276	276	276
C3 - 60x100	165	-	-	-	-	51	165	165	165	165	165	165	165	165	165	165	165
C4 - 60x100	244	-	-	-	-	13	165	244	244	244	244	244	244	244	244	244	244
C5 - Apts	216	-	-	-	-	13	165	216	216	216	216	216	216	216	216	216	216
D - SFR	225	-	-	-	-	51	203	225	225	225	225	225	225	225	225	225	225
Apartments	1,848	-	-	-	75	450	975	1,335	1,695	1,848	1,848	1,848	1,848	1,848	1,848	1,848	1,848
B5 - Apts	360	-	-	-	15	195	360	360	360	360	360	360	360	360	360	360	360
B7 - Apts	808	-	-	-	60	240	420	600	780	808	808	808	808	808	808	808	808
C5 - Apts	680	-	-	-	-	15	195	375	555	680	680	680	680	680	680	680	680
CUM. EMPLOYEES	1,689	-	-	-	-	1,057	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689
Commercial - Retail	425	-	-	-	-	425	425	425	425	425	425	425	425	425	425	425	425
Commercial - Office	1,264	-	-	-	-	632	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264	1,264

A-7.5 ...Continued
Product Level Cumulative Assessed Values, and Cumulative Retail Expenditure Estimates – by Community: LEGACY

LEGACY	By 2031	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CUM. ASSESSED VALUE	31,888,553	-	-	26,329	227,528	911,977	1,528,853	1,717,930	1,809,313	1,833,330	1,833,330	1,833,330	1,833,330	1,833,330	1,833,330	1,833,330	1,833,330
Residential for Sale	1,470,778,862	-	-	26,329,309	220,214,884	742,157,233	1,256,393,954	1,407,971,886	1,462,268,836	1,470,778,862	1,470,778,862	1,470,778,862	1,470,778,862	1,470,778,862	1,470,778,862	1,470,778,862	1,470,778,862
A1 - Triplex	47,703,727	-	-	-	18,684,323	47,703,727	47,703,727	47,703,727	47,703,727	47,703,727	47,703,727	47,703,727	47,703,727	47,703,727	47,703,727	47,703,727	47,703,727
A2 - 45x100	48,568,717	-	-	14,084,377	38,033,399	48,568,717	48,568,717	48,568,717	48,568,717	48,568,717	48,568,717	48,568,717	48,568,717	48,568,717	48,568,717	48,568,717	48,568,717
A3 - Triplex	19,667,071	-	-	-	-	18,679,413	19,667,071	19,667,071	19,667,071	19,667,071	19,667,071	19,667,071	19,667,071	19,667,071	19,667,071	19,667,071	19,667,071
A7 - 60x110	66,223,508	-	-	-	-	24,761,951	54,278,242	66,223,508	66,223,508	66,223,508	66,223,508	66,223,508	66,223,508	66,223,508	66,223,508	66,223,508	66,223,508
A8 - 50x105	150,504,577	-	-	-	21,303,547	57,707,460	93,911,739	129,916,385	150,504,577	150,504,577	150,504,577	150,504,577	150,504,577	150,504,577	150,504,577	150,504,577	150,504,577
A9 - 50x105	18,358,378	-	-	-	7,857,297	18,358,378	18,358,378	18,358,378	18,358,378	18,358,378	18,358,378	18,358,378	18,358,378	18,358,378	18,358,378	18,358,378	18,358,378
A10 - 55x110	61,827,591	-	-	-	10,826,753	43,221,763	61,827,591	61,827,591	61,827,591	61,827,591	61,827,591	61,827,591	61,827,591	61,827,591	61,827,591	61,827,591	61,827,591
A11 - 60x110	70,043,842	-	-	-	24,387,515	53,440,048	70,043,842	70,043,842	70,043,842	70,043,842	70,043,842	70,043,842	70,043,842	70,043,842	70,043,842	70,043,842	70,043,842
A12 - 45x100	83,396,464	-	-	9,768,556	39,002,779	68,022,670	83,396,464	83,396,464	83,396,464	83,396,464	83,396,464	83,396,464	83,396,464	83,396,464	83,396,464	83,396,464	83,396,464
A13 - Duplex	66,715,960	-	-	2,476,377	32,173,275	61,634,693	66,715,960	66,715,960	66,715,960	66,715,960	66,715,960	66,715,960	66,715,960	66,715,960	66,715,960	66,715,960	66,715,960
B3 - Condos	66,065,729	-	-	-	2,707,993	35,183,901	66,065,729	66,065,729	66,065,729	66,065,729	66,065,729	66,065,729	66,065,729	66,065,729	66,065,729	66,065,729	66,065,729
B4 - Condos	26,437,463	-	-	-	-	25,016,382	26,437,463	26,437,463	26,437,463	26,437,463	26,437,463	26,437,463	26,437,463	26,437,463	26,437,463	26,437,463	26,437,463
B5 - Apts	20,441,218	-	-	-	20,441,218	20,441,218	20,441,218	20,441,218	20,441,218	20,441,218	20,441,218	20,441,218	20,441,218	20,441,218	20,441,218	20,441,218	20,441,218
B6 - Condos	30,544,767	-	-	-	-	25,693,076	30,544,767	30,544,767	30,544,767	30,544,767	30,544,767	30,544,767	30,544,767	30,544,767	30,544,767	30,544,767	30,544,767
B7 - Apts	41,917,191	-	-	-	-	28,742,104	41,917,191	41,917,191	41,917,191	41,917,191	41,917,191	41,917,191	41,917,191	41,917,191	41,917,191	41,917,191	41,917,191
B8 Temp School	130,642,067	-	-	-	-	20,112,263	54,416,691	88,423,284	122,132,042	130,642,067	130,642,067	130,642,067	130,642,067	130,642,067	130,642,067	130,642,067	130,642,067
B9 - Condos	11,663,713	-	-	-	-	11,663,713	11,663,713	11,663,713	11,663,713	11,663,713	11,663,713	11,663,713	11,663,713	11,663,713	11,663,713	11,663,713	11,663,713
B10 - Condos	33,710,877	-	-	-	-	10,971,154	33,710,877	33,710,877	33,710,877	33,710,877	33,710,877	33,710,877	33,710,877	33,710,877	33,710,877	33,710,877	33,710,877
B11 - Condos	32,039,212	-	-	-	-	2,600,041	32,039,212	32,039,212	32,039,212	32,039,212	32,039,212	32,039,212	32,039,212	32,039,212	32,039,212	32,039,212	32,039,212
B12 - Condos	42,872,995	-	-	-	-	2,494,245	42,872,995	42,872,995	42,872,995	42,872,995	42,872,995	42,872,995	42,872,995	42,872,995	42,872,995	42,872,995	42,872,995
C1a - 45x100	60,642,174	-	-	-	-	2,302,541	29,913,570	57,291,088	60,642,174	60,642,174	60,642,174	60,642,174	60,642,174	60,642,174	60,642,174	60,642,174	60,642,174
C1b - 45x100	40,189,280	-	-	-	-	14,034,515	37,848,200	40,189,280	40,189,280	40,189,280	40,189,280	40,189,280	40,189,280	40,189,280	40,189,280	40,189,280	40,189,280
C2a - 50x100	40,399,696	-	-	-	-	8,019,723	31,938,615	40,399,696	40,399,696	40,399,696	40,399,696	40,399,696	40,399,696	40,399,696	40,399,696	40,399,696	40,399,696
C2b - 45x100	55,399,495	-	-	-	-	2,566,252	33,331,523	55,399,495	55,399,495	55,399,495	55,399,495	55,399,495	55,399,495	55,399,495	55,399,495	55,399,495	55,399,495
C3 - 60x100	25,579,875	-	-	-	-	7,938,794	25,579,875	25,579,875	25,579,875	25,579,875	25,579,875	25,579,875	25,579,875	25,579,875	25,579,875	25,579,875	25,579,875
C4 - 60x100	50,119,672	-	-	-	-	2,623,990	34,083,862	50,119,672	50,119,672	50,119,672	50,119,672	50,119,672	50,119,672	50,119,672	50,119,672	50,119,672	50,119,672
C5 - Apts	43,815,554	-	-	-	-	2,611,082	33,903,154	43,815,554	43,815,554	43,815,554	43,815,554	43,815,554	43,815,554	43,815,554	43,815,554	43,815,554	43,815,554
D - SFR	85,288,050	-	-	-	-	19,527,211	77,836,053	85,288,050	85,288,050	85,288,050	85,288,050	85,288,050	85,288,050	85,288,050	85,288,050	85,288,050	85,288,050
Apartments	187,996,096	-	-	-	-	7,312,743	44,069,084	97,903,963	135,402,762	172,489,398	187,996,096	187,996,096	187,996,096	187,996,096	187,996,096	187,996,096	187,996,096
B5 - Apts	34,938,035	-	-	-	-	1,463,669	19,014,122	34,938,035	34,938,035	34,938,035	34,938,035	34,938,035	34,938,035	34,938,035	34,938,035	34,938,035	34,938,035
B7 - Apts	76,622,597	-	-	-	-	5,849,074	23,336,406	40,644,064	57,772,048	74,720,358	76,622,597	76,622,597	76,622,597	76,622,597	76,622,597	76,622,597	76,622,597
C5 - Apts	76,435,463	-	-	-	-	1,718,557	22,321,864	42,692,680	62,831,005	76,435,463	76,435,463	76,435,463	76,435,463	76,435,463	76,435,463	76,435,463	76,435,463
Commercial - Retail	76,463,437	-	-	-	-	76,463,437	76,463,437	76,463,437	76,463,437	76,463,437	76,463,437	76,463,437	76,463,437	76,463,437	76,463,437	76,463,437	76,463,437
Commercial - Office	98,091,763	-	-	-	-	49,287,254	98,091,763	98,091,763	98,091,763	98,091,763	98,091,763	98,091,763	98,091,763	98,091,763	98,091,763	98,091,763	98,091,763
LEGACY	By 2031	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
RETAIL EXPENDITURE	30,822	-	-	429	3,831	14,365	24,589	28,178	30,190	30,822	30,822	30,822	30,822	30,822	30,822	30,822	30,822
Residential for Sale	24,533	-	-	429	3,833	12,480	20,823	23,380	24,361	24,533	24,533	24,533	24,533	24,533	24,533	24,533	24,533
A1 - Triplex	874	-	-	-	340	874	874	874	874	874	874	874	874	874	874	874	874
A2 - 45x100	842	-	-	241	653	842	842	842	842	842	842	842	842	842	842	842	842
A3 - Triplex	364	-	-	-	-	340	364	364	364	364	364	364	364	364	364	364	364
A7 - 60x110	1,027	-	-	-	-	380	836	1,027	1,027	1,027	1,027	1,027	1,027	1,027	1,027	1,027	1,027
A8 - 50x105	2,578	-	-	-	361	980	1,598	2,217	2,578	2,578	2,578	2,578	2,578	2,578	2,578	2,578	2,578
A9 - 50x105	327	-	-	-	137	327	327	327	327	327	327	327	327	327	327	327	327
A10 - 55x110	954	-	-	-	166	663	954	954	954	954	954	954	954	954	954	954	954
A11 - 60x110	1,087	-	-	-	375	825	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087
A12 - 45x100	1,293	-	-	150	600	1,050	1,293	1,293	1,293	1,293	1,293	1,293	1,293	1,293	1,293	1,293	1,293
A13 - Duplex	1,036	-	-	38	494	951	1,036	1,036	1,036	1,036	1,036	1,036	1,036	1,036	1,036	1,036	1,036
B3 - Condos	1,016	-	-	-	41	539	1,016	1,016	1,016	1,016	1,016	1,016	1,016	1,016	1,016	1,016	1,016
B4 - Condos	547	-	-	-	-	505	547	547	547	547	547	547	547	547	547	547	547
B5 - Apts	371	-	-	-	371	371	371	371	371	371	371	371	371	371	371	371	371
B6 - Condos	613	-	-	-	-	511	613	613	613	613	613	613	613	613	613	613	613
B7 - Apts	758	-	-	-	-	517	758	758	758	758	758	758	758	758	758	758	758
B8 Temp School	2,394	-	-	-	-	362	982	1,602	2,222	2,394	2,394						

A-7.6 Product Level Absorption Schedule – by Community: LANDMARK

Use - Product	Total	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION - UNITS	1,444	456	860	128	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential for Sale	993	456	409	128	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Area D Alley	141	48	48	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Area E Alley	141	48	48	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Area F Alley / Traditional	114	48	48	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Area G SFD	107	48	48	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Area H SFD	87	48	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Area A Condo	144	72	72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Area B Condo	153	72	72	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Area C Condo	106	72	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apartments	451	-	451	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Market Rate	299	-	299	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Affordable - 50%	152	-	152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ABSORPTION - SF	373,701	-	188,398	-	-	-	-	185,303	-	-	-	-	-	-	-	-	-	-
Commercial - Retail	94,199	-	94,199	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 10	6,534	-	6,534	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 10	7,079	-	7,079	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 29	80,586	-	80,586	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	279,502	-	94,199	-	-	-	-	185,303	-	-	-	-	-	-	-	-	-	-
Lot 15	94,199	-	94,199	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lot 30	185,303	-	-	-	-	-	-	185,303	-	-	-	-	-	-	-	-	-	-

Product Level Cumulative Population & Employee Estimates – by Community: LANDMARK

LANDMARK	By 2031	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CUM. POPULATION	4,275	1,446	3,870	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275	4,275
Residential for Sale	3,148	1,446	2,742	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148	3,148
PA5 - SFD	447	152	304	447	447	447	447	447	447	447	447	447	447	447	447	447	447	447
PA6 - SFD	447	152	304	447	447	447	447	447	447	447	447	447	447	447	447	447	447	447
PA9 - Apt/Condo	361	152	304	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361
PA10 - Apt/Condo	339	152	304	339	339	339	339	339	339	339	339	339	339	339	339	339	339	339
PA15a - Loft Over Retail	276	152	276	276	276	276	276	276	276	276	276	276	276	276	276	276	276	276
PA15b - Condo on Podium	456	228	456	456	456	456	456	456	456	456	456	456	456	456	456	456	456	456
PA15c - Townhomes	485	228	456	485	485	485	485	485	485	485	485	485	485	485	485	485	485	485
PA15d - Tower Condos	336	228	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336	336
Apartments	1,128	-	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128	1,128
PA1a - Apt	748	-	748	748	748	748	748	748	748	748	748	748	748	748	748	748	748	748
PA15e - Apt	380	-	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380
CUM. EMPLOYEES	1,354	-	612	612	612	612	612	1,354	1,354	1,354	1,354	1,354	1,354	1,354	1,354	1,354	1,354	1,354
Commercial - Retail	235	-	235	235	235	235	235	235	235	235	235	235	235	235	235	235	235	235
PA14	16	-	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
PA1b	18	-	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
PA15f	201	-	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201
Commercial - Office	1,118	-	377	377	377	377	377	1,118	1,118	1,118	1,118	1,118	1,118	1,118	1,118	1,118	1,118	1,118
PA1b - Lots 2-7	377	-	377	377	377	377	377	377	377	377	377	377	377	377	377	377	377	377
PA15g	741	-	-	-	-	-	-	741	741	741	741	741	741	741	741	741	741	741

A-7.6 ...Continued

[illegible]

Product Level Cumulative Retail Expenditure Estimates – by Community: LANDMARK

[illegible]

A-7.7
Product Level Absorption Schedule – by Community: COMMERCE CENTER

Use - Product	Total	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ABSORPTION - SF	3,200,002	-	228,572	754,287	754,286	1,142,858	320,000	-	-	-	-	-	-	-	-	-	-	-
Commercial - Retail	300,715	-	-	143,751	156,965	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 2	91,429	-	-	91,429	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 3	209,286	-	-	52,322	156,965	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	1,159,795	-	91,429	285,378	197,846	457,144	128,000	-	-	-	-	-	-	-	-	-	-	-
Phase 1	182,657	-	91,429	91,429	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 2	164,572	-	-	164,572	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 3	117,508	-	-	29,377	88,131	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 4	219,429	-	-	-	109,715	109,715	-	-	-	-	-	-	-	-	-	-	-	-
Phase 5	219,429	-	-	-	-	219,429	-	-	-	-	-	-	-	-	-	-	-	-
Phase 6	256,000	-	-	-	-	128,000	128,000	-	-	-	-	-	-	-	-	-	-	-
Industrial R&D	1,739,492	-	137,143	325,159	399,476	685,715	192,000	-	-	-	-	-	-	-	-	-	-	-
Phase 1	274,286	-	137,143	137,143	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 2	109,714	-	-	109,714	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 3	313,206	-	-	78,302	234,905	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 4	329,143	-	-	-	164,572	164,572	-	-	-	-	-	-	-	-	-	-	-	-
Phase 5	329,143	-	-	-	-	329,143	-	-	-	-	-	-	-	-	-	-	-	-
Phase 6	384,000	-	-	-	-	192,000	192,000	-	-	-	-	-	-	-	-	-	-	-

Product Level Cumulative Population & Employee Estimates – by Community: COMMERCE CENTER

Use - Product	By 2031	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CUM. POPULATION	1,300	-	640	2,791	4,774	7,974	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870	8,870
Commercial - Retail	752	-	-	359	752	752	752	752	752	752	752	752	752	752	752	752	752	752
Phase 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 2	229	-	-	229	229	229	229	229	229	229	229	229	229	229	229	229	229	229
Phase 3	523	-	-	131	523	523	523	523	523	523	523	523	523	523	523	523	523	523
Phase 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	4,639	-	366	1,507	2,299	4,127	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639	4,639
Phase 1	731	-	366	731	731	731	731	731	731	731	731	731	731	731	731	731	731	731
Phase 2	658	-	-	658	658	658	658	658	658	658	658	658	658	658	658	658	658	658
Phase 3	470	-	-	118	470	470	470	470	470	470	470	470	470	470	470	470	470	470
Phase 4	878	-	-	-	439	878	878	878	878	878	878	878	878	878	878	878	878	878
Phase 5	878	-	-	-	-	878	878	878	878	878	878	878	878	878	878	878	878	878
Phase 6	1,024	-	-	-	-	512	1,024	1,024	1,024	1,024	1,024	1,024	1,024	1,024	1,024	1,024	1,024	1,024
Industrial R&D	3,479	-	274	925	1,724	3,095	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479	3,479
Phase 1	549	-	274	549	549	549	549	549	549	549	549	549	549	549	549	549	549	549
Phase 2	219	-	-	219	219	219	219	219	219	219	219	219	219	219	219	219	219	219
Phase 3	626	-	-	157	626	626	626	626	626	626	626	626	626	626	626	626	626	626
Phase 4	658	-	-	-	329	658	658	658	658	658	658	658	658	658	658	658	658	658
Phase 5	658	-	-	-	-	658	658	658	658	658	658	658	658	658	658	658	658	658
Phase 6	768	-	-	-	-	384	768	768	768	768	768	768	768	768	768	768	768	768

A-7.7 ...Continued
Product Level Cumulative Assessed Values – by Community: COMMERCE CENTER

Use - Product	By 2031	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ASSESSED VALUE	893,430	-	58,308	293,016	522,983	813,266	893,430	893,430	893,430	893,430	893,430	893,430	893,430	893,430	893,430	893,430	893,430	893,430
Commercial - Retail	158,116,331	-	-	75,724,658	#####	#####	158,116,331	158,116,331	158,116,331	158,116,331	158,116,331	158,116,331	158,116,331	158,116,331	158,116,331	158,116,331	158,116,331	158,116,331
Phase 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 2	48,162,822	-	-	48,162,822	48,162,822	48,162,822	48,162,822	48,162,822	48,162,822	48,162,822	48,162,822	48,162,822	48,162,822	48,162,822	48,162,822	48,162,822	48,162,822	48,162,822
Phase 3	109,953,508	-	-	27,561,836	109,953,508	109,953,508	109,953,508	109,953,508	109,953,508	109,953,508	109,953,508	109,953,508	109,953,508	109,953,508	109,953,508	109,953,508	109,953,508	109,953,508
Phase 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	367,126,926	-	29,033,792	119,357,998	182,089,053	326,898,910	367,126,926	367,126,926	367,126,926	367,126,926	367,126,926	367,126,926	367,126,926	367,126,926	367,126,926	367,126,926	367,126,926	367,126,926
Phase 1	57,768,067	-	29,033,792	57,768,067	57,768,067	57,768,067	57,768,067	57,768,067	57,768,067	57,768,067	57,768,067	57,768,067	57,768,067	57,768,067	57,768,067	57,768,067	57,768,067	57,768,067
Phase 2	52,261,049	-	-	52,261,049	52,261,049	52,261,049	52,261,049	52,261,049	52,261,049	52,261,049	52,261,049	52,261,049	52,261,049	52,261,049	52,261,049	52,261,049	52,261,049	52,261,049
Phase 3	37,219,291	-	-	9,328,882	37,219,291	37,219,291	37,219,291	37,219,291	37,219,291	37,219,291	37,219,291	37,219,291	37,219,291	37,219,291	37,219,291	37,219,291	37,219,291	37,219,291
Phase 4	69,321,870	-	-	-	34,840,646	69,321,870	69,321,870	69,321,870	69,321,870	69,321,870	69,321,870	69,321,870	69,321,870	69,321,870	69,321,870	69,321,870	69,321,870	69,321,870
Phase 5	69,681,292	-	-	-	-	69,681,292	69,681,292	69,681,292	69,681,292	69,681,292	69,681,292	69,681,292	69,681,292	69,681,292	69,681,292	69,681,292	69,681,292	69,681,292
Phase 6	80,875,357	-	-	-	-	40,647,341	80,875,357	80,875,357	80,875,357	80,875,357	80,875,357	80,875,357	80,875,357	80,875,357	80,875,357	80,875,357	80,875,357	80,875,357
Industrial R&D	368,186,950	-	29,274,401	97,933,597	182,777,802	328,251,145	368,186,950	368,186,950	368,186,950	368,186,950	368,186,950	368,186,950	368,186,950	368,186,950	368,186,950	368,186,950	368,186,950	368,186,950
Phase 1	57,800,006	-	29,274,401	57,800,006	57,800,006	57,800,006	57,800,006	57,800,006	57,800,006	57,800,006	57,800,006	57,800,006	57,800,006	57,800,006	57,800,006	57,800,006	57,800,006	57,800,006
Phase 2	23,419,435	-	-	23,419,435	23,419,435	23,419,435	23,419,435	23,419,435	23,419,435	23,419,435	23,419,435	23,419,435	23,419,435	23,419,435	23,419,435	23,419,435	23,419,435	23,419,435
Phase 3	66,429,101	-	-	16,714,156	66,429,101	66,429,101	66,429,101	66,429,101	66,429,101	66,429,101	66,429,101	66,429,101	66,429,101	66,429,101	66,429,101	66,429,101	66,429,101	66,429,101
Phase 4	69,359,965	-	-	-	35,129,260	69,359,965	69,359,965	69,359,965	69,359,965	69,359,965	69,359,965	69,359,965	69,359,965	69,359,965	69,359,965	69,359,965	69,359,965	69,359,965
Phase 5	70,258,520	-	-	-	-	70,258,520	70,258,520	70,258,520	70,258,520	70,258,520	70,258,520	70,258,520	70,258,520	70,258,520	70,258,520	70,258,520	70,258,520	70,258,520
Phase 6	80,919,924	-	-	-	-	40,984,119	80,919,924	80,919,924	80,919,924	80,919,924	80,919,924	80,919,924	80,919,924	80,919,924	80,919,924	80,919,924	80,919,924	80,919,924

Product Level Cumulative Retail Expenditure Estimates – by Community: COMMERCE CENTER

Use - Product	By 2031	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
RETAIL EXP.	5,824	-	420	1,833	3,135	5,236	5,824	5,824	5,824	5,824	5,824	5,824	5,824	5,824	5,824	5,824	5,824	5,824
Commercial - Retail	494	-	-	236	494	494	494	494	494	494	494	494	494	494	494	494	494	494
Phase 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 2	150	-	-	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
Phase 3	344	-	-	86	344	344	344	344	344	344	344	344	344	344	344	344	344	344
Phase 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial - Office	3,046	-	240	990	1,509	2,710	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,046	3,046
Phase 1	480	-	240	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480
Phase 2	432	-	-	432	432	432	432	432	432	432	432	432	432	432	432	432	432	432
Phase 3	309	-	-	77	309	309	309	309	309	309	309	309	309	309	309	309	309	309
Phase 4	576	-	-	-	288	576	576	576	576	576	576	576	576	576	576	576	576	576
Phase 5	576	-	-	-	-	576	576	576	576	576	576	576	576	576	576	576	576	576
Phase 6	672	-	-	-	-	336	672	672	672	672	672	672	672	672	672	672	672	672
Industrial R&D	2,284	-	180	607	1,132	2,032	2,284	2,284	2,284	2,284	2,284	2,284	2,284	2,284	2,284	2,284	2,284	2,284
Phase 1	360	-	180	360	360	360	360	360	360	360	360	360	360	360	360	360	360	360
Phase 2	144	-	-	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144
Phase 3	411	-	-	103	411	411	411	411	411	411	411	411	411	411	411	411	411	411
Phase 4	432	-	-	-	216	432	432	432	432	432	432	432	432	432	432	432	432	432
Phase 5	432	-	-	-	-	432	432	432	432	432	432	432	432	432	432	432	432	432
Phase 6	504	-	-	-	-	252	504	504	504	504	504	504	504	504	504	504	504	504

A-8.1

**Product Level Taxable Retail Expenditure spent per household in Unincorporated Los Angeles County outside Project Area –
by Community: ENTRADA**

Use Product	Unit Price	Interest (%)	Term (Years)	Down Payment (% of Price)	Insurance (\$/Yr.)	Mortgage (\$/Yr.)	Property Tax (\$/Yr.)	Housing Exp. (\$/Yr.)	Housing Share	Imputed HH Income (\$/Yr.)	Retail Exp./HH Less Auto Sales (% of HH Income)	Taxable Sale	In Uninc. LA County	
													% of Sales (%)	Amount (\$/Yr.)
Residential for Sale														
PA5 - SFD	662,667	6.50%	30	35%	975	32,984	6,627	40,586	30.0%	135,287	25.8%	88.0%	32.8%	10,079
PA6 - SFD	739,000	6.50%	30	35%	975	36,784	7,390	45,149	30.0%	150,497	19.3%	90.1%	32.5%	8,486
PA7 - SFD	548,000	6.50%	30	30%	830	29,375	5,480	35,685	30.0%	118,950	27.4%	87.5%	32.4%	9,217
PA4 - SFA	583,750	6.50%	30	30%	830	31,291	5,838	37,959	30.0%	126,530	25.8%	88.0%	32.8%	9,427
PA8 - SFA	533,667	6.50%	30	30%	830	28,607	5,337	34,773	30.0%	115,912	27.4%	87.5%	32.4%	8,982
PA13 - SFA	497,750	6.50%	30	25%	775	28,587	4,978	34,340	30.0%	114,466	27.4%	87.5%	32.4%	8,870
PA12 - SFA	454,000	6.50%	30	25%	775	26,075	4,540	31,390	30.0%	104,632	27.4%	87.5%	32.4%	8,108
PA11 - SFA	421,000	6.50%	30	25%	775	24,179	4,210	29,164	30.0%	97,214	28.6%	88.1%	33.8%	8,282
PA9 - Apt/Condo	407,000	6.50%	30	25%	775	23,375	4,070	28,220	30.0%	94,068	28.6%	88.1%	33.8%	8,014
PA10 - Apt/Condo	420,000	6.50%	30	25%	775	24,122	4,200	29,097	30.0%	96,990	28.6%	88.1%	33.8%	8,263
PA15a - Loft Over Retail	471,000	6.50%	30	25%	775	27,051	4,710	32,536	30.0%	108,453	27.4%	87.5%	32.4%	8,404
PA15b - Condo on Podium	420,000	6.50%	30	25%	775	24,122	4,200	29,097	30.0%	96,990	28.6%	88.1%	33.8%	8,263
PA15c - Townhomes	491,000	6.50%	30	25%	775	28,200	4,910	33,885	30.0%	112,949	27.4%	87.5%	32.4%	8,752
PA15d - Tower Condos	583,000	6.50%	30	30%	830	31,251	5,830	37,911	30.0%	126,371	25.8%	88.0%	32.8%	9,415

OTHER USES:-

Apartment Use:

Summary table below give retail expenditure methodology per household for the three rent levels of apartment units across all the communities:-

Rent	As % of Income	Imputed Income	Retail Exp. per HH in %	Taxable Sales %	Per Capita Expenditure In Uninc. LA County			
					% Out NR	% In NR	\$ Out NR	\$ In NR
1,700	30.0%	68,000	36.1%	87.2%	30.7%	15.3%	6,582	3,278
1,500	30.0%	60,000	36.1%	87.2%	30.7%	15.3%	5,808	2,893
900	30.0%	36,000	45.6%	85.3%	30.4%	16.3%	4,253	2,288

Non-Residential Uses:

Summary table below give retail expenditure methodology per employee working in Commercial & Industrial uses in Newhall Ranch communities:-

Retail Exp./Emp.	Taxable Sales %	Per Capita Expenditure In Uninc. LA County			
		Outside NR	In NR	\$ Outside NR	\$ In NR
\$3,000	87.5%	25.0%	60.0%	\$ 657	1,576

ASSUMPTIONS:-

Household Income	Retail Exp.	Taxable Sales	In Uninc. LA County Outside Project Area	In Project Area's New Retail Space	Unit Price	% Down Payment	Insurance
\$30,000 to \$39,999	45.6%	85.3%	30.4%	16.3%	Less than \$500,000	25%	\$775
\$40,000 to \$49,999	40.0%	86.2%	30.3%	15.9%	\$500,000 to \$600,000	30%	\$830
\$50,000 to \$69,999	36.1%	87.2%	30.7%	15.3%	\$600,000 to \$750,000	35%	\$975
\$70,000 to \$79,999	32.9%	87.5%	30.2%	15.2%	\$750,000 to \$1,00,000	40%	\$1,160
\$80,000 to \$99,999	28.6%	88.1%	33.8%	15.3%	\$1,000,000 to \$2,000,000	45%	\$1,360
\$100,000 to \$119,999	27.4%	87.5%	32.4%	15.8%	\$2,000,000 and More	50%	\$1,650
\$120,000 to \$149,999	25.8%	88.0%	32.8%	15.4%			
\$150,000 and More	19.3%	90.1%	32.5%	14.1%			

Interest:

Per California Association of Realtors, for January, 2006

Tax:

1% of the Property Value

Homeowner Insurance:

Per California Department of Insurance ([http://cdinswww.insurance.ca.gov/pls/wu_survey_homeowners/hpsw_get_prem\\$.startup](http://cdinswww.insurance.ca.gov/pls/wu_survey_homeowners/hpsw_get_prem$.startup))

Retail Expenditure per HH:

Per Consumer Expenditure Survey (CES), 2004, for respective income brackets. Excluding Housing, Auto Sales, Health Care, Educational, and Other Services.

Taxable Retail Expenses:

Assumes 70% of Food Stores expenses, and 30% of Drug Store expenses to be non-taxable. Percentage based on the share of each categories in respective income bracket.

% Spent in Uninc. LA County:

Based on primary survey of resident consumers in the immediate site context, and CES.

A-8.2
Product Level Taxable Retail Expenditure spent per household in Unincorporated Los Angeles County outside Project Area –
by Community: HOMESTEAD

Use Product	Unit Price	Interest (%)	Term (Years)	Down Payment (% of Price)	Insurance (\$/Yr.)	Mortgage (\$/Yr.)	Property Tax (\$/Yr.)	Housing Exp. (\$/Yr.)	Housing Share	Imputed HH Income (\$/Yr.)	Retail Exp./HH Less Auto Sales (% of HH Income)	Taxable Sale	In Uninc. LA County	
													% of Sales (%)	Amount (\$/Yr.)
Residential for Sale														
Chiquito Det. Condos	458,000	6.50%	30	25%	775	26,304	4,580	31,659	30.0%	105,531	27.4%	87.5%	32.4%	8,177
Chiquito Customs	2,500,000	6.50%	30	50%	1,650	95,722	25,000	122,372	30.0%	407,906	19.3%	90.1%	32.5%	23,000
HS Central SFD	880,000	6.50%	30	40%	1,160	40,433	8,800	50,393	30.0%	167,976	19.3%	90.1%	32.5%	9,471
HS Central Customs	2,500,000	6.50%	30	50%	1,650	95,722	25,000	122,372	30.0%	407,906	19.3%	90.1%	32.5%	23,000
HS West HW-2	637,000	6.50%	30	35%	975	31,707	6,370	39,052	30.0%	130,173	25.8%	88.0%	32.8%	9,698
HS West Custom	2,500,000	6.50%	30	50%	1,650	95,722	25,000	122,372	30.0%	407,906	19.3%	90.1%	32.5%	23,000
HS West Green Court HW	510,000	6.50%	30	30%	830	27,338	5,100	33,268	30.0%	110,894	27.4%	87.5%	32.4%	8,593
Long Canyon SFD 75	947,000	6.50%	30	40%	1,160	43,511	9,470	54,141	30.0%	180,471	19.3%	90.1%	32.5%	10,176
Long Canyon SFD 80	1,049,000	6.50%	30	45%	1,360	44,181	10,490	56,031	30.0%	186,771	19.3%	90.1%	32.5%	10,531
Long Canyon SFD 50	913,000	6.50%	30	40%	1,160	41,949	9,130	52,239	30.0%	174,130	19.3%	90.1%	32.5%	9,818
LCS - 3 SFD5500	913,000	6.50%	30	40%	1,160	41,949	9,130	52,239	30.0%	174,130	19.3%	90.1%	32.5%	9,818
LCS -4 SFD6500	925,000	6.50%	30	40%	1,160	42,500	9,250	52,910	30.0%	176,368	19.3%	90.1%	32.5%	9,944
Onion Fields SFD 55	880,000	6.50%	30	40%	1,160	40,433	8,800	50,393	30.0%	167,976	19.3%	90.1%	32.5%	9,471
Onion Fields SFD 50x90	846,000	6.50%	30	40%	1,160	38,871	8,460	48,491	30.0%	161,636	19.3%	90.1%	32.5%	9,114
Onion Field SFD 35	527,000	6.50%	30	30%	830	28,249	5,270	34,349	30.0%	114,498	27.4%	87.5%	32.4%	8,872
Potrero Ridge Customs	2,500,000	6.50%	30	50%	1,650	95,722	25,000	122,372	30.0%	407,906	19.3%	90.1%	32.5%	23,000
Mesas West 4 SFD Cluste	510,000	6.50%	30	30%	830	27,338	5,100	33,268	30.0%	110,894	27.4%	87.5%	32.4%	8,593
Mesas West 11 SFD Clus	510,000	6.50%	30	30%	830	27,338	5,100	33,268	30.0%	110,894	27.4%	87.5%	32.4%	8,593
HS Central 4 Plex HC-2	498,000	6.50%	30	25%	775	28,602	4,980	34,357	30.0%	114,522	27.4%	87.5%	32.4%	8,874
HS Central 2 Story TF HC	471,000	6.50%	30	25%	775	27,051	4,710	32,536	30.0%	108,453	27.4%	87.5%	32.4%	8,404
HS Central 3 Story TF HC	473,000	6.50%	30	25%	775	27,166	4,730	32,671	30.0%	108,903	27.4%	87.5%	32.4%	8,439
HS Central E1 16 Plex	422,000	6.50%	30	25%	775	24,237	4,220	29,232	30.0%	97,439	28.6%	88.1%	33.8%	8,302
HS West 3-4 Plex	498,000	6.50%	30	25%	775	28,602	4,980	34,357	30.0%	114,522	27.4%	87.5%	32.4%	8,874
HS West Triplex HW-5	473,000	6.50%	30	25%	775	27,166	4,730	32,671	30.0%	108,903	27.4%	87.5%	32.4%	8,439
Long Canyon 3 Story	458,000	6.50%	30	25%	775	26,304	4,580	31,659	30.0%	105,531	27.4%	87.5%	32.4%	8,177
LCS 1 & 2	500,000	6.50%	30	25%	775	28,717	5,000	34,492	30.0%	114,972	27.4%	87.5%	32.4%	8,909
Onion Fields Triplex	455,000	6.50%	30	25%	775	26,132	4,550	31,457	30.0%	104,857	27.4%	87.5%	32.4%	8,125
Onion Fields 3 Story Town	458,000	6.50%	30	25%	775	26,304	4,580	31,659	30.0%	105,531	27.4%	87.5%	32.4%	8,177
Mesas West 1A 3/4 Plex	490,000	6.50%	30	25%	775	28,142	4,900	33,817	30.0%	112,724	27.4%	87.5%	32.4%	8,735
Mesas West 3A 3/4 Plex	490,000	6.50%	30	25%	775	28,142	4,900	33,817	30.0%	112,724	27.4%	87.5%	32.4%	8,735
Mesas West 1B-10 Plex	450,000	6.50%	30	25%	775	25,845	4,500	31,120	30.0%	103,733	27.4%	87.5%	32.4%	8,038
Mesas West 3B 10 Plex	450,000	6.50%	30	25%	775	25,845	4,500	31,120	30.0%	103,733	27.4%	87.5%	32.4%	8,038
Mesas West 7A 10 Plex	450,000	6.50%	30	25%	775	25,845	4,500	31,120	30.0%	103,733	27.4%	87.5%	32.4%	8,038
Mesas West 12A 10 Plex	450,000	6.50%	30	25%	775	25,845	4,500	31,120	30.0%	103,733	27.4%	87.5%	32.4%	8,038
Mesas West 6 2/3 Duplex	575,000	6.50%	30	30%	830	30,822	5,750	37,402	30.0%	124,675	25.8%	88.0%	32.8%	9,289
Mesas West 7B 10 Plex	450,000	6.50%	30	25%	775	25,845	4,500	31,120	30.0%	103,733	27.4%	87.5%	32.4%	8,038
Mesas West 8B 2 Story T	473,000	6.50%	30	25%	775	27,166	4,730	32,671	30.0%	108,903	27.4%	87.5%	32.4%	8,439
Mesas West 10 16 Plex	473,000	6.50%	30	25%	775	27,166	4,730	32,671	30.0%	108,903	27.4%	87.5%	32.4%	8,439
Mesas West 12B 16 Plex	473,000	6.50%	30	25%	775	27,166	4,730	32,671	30.0%	108,903	27.4%	87.5%	32.4%	8,439

A-8.3

**Product Level Taxable Retail Expenditure spent per household in Unincorporated Los Angeles County outside Project Area –
by Community: POTRERO**

Use Product	Unit Price	Interest (%)	Term (Years)	Down Payment (% of Price)	Insurance (\$/Yr.)	Mortgage (\$/Yr.)	Property Tax (\$/Yr.)	Housing Exp. (\$/Yr.)	Housing Share	Imputed HH Income (\$/Yr.)	Retail Exp./HH Less Auto Sales (% of HH Income)	Taxable Sale	In Uninc. LA County	
													% of Sales (%)	Amount (\$/Yr.)
Residential for Sale														
PE1 140 x 100 estates	2,500,000	6.50%	30	50%	1,650	95,722	25,000	122,372	30.0%	407,906	19.3%	90.1%	32.5%	23,000
PE 2 140 x 100 estates	2,500,000	6.50%	30	50%	1,650	95,722	25,000	122,372	30.0%	407,906	19.3%	90.1%	32.5%	23,000
P 6500	935,000	6.50%	30	40%	1,160	42,960	9,350	53,470	30.0%	178,233	19.3%	90.1%	32.5%	10,050
P6000	861,000	6.50%	30	40%	1,160	39,560	8,610	49,330	30.0%	164,433	19.3%	90.1%	32.5%	9,271
P5500	796,000	6.50%	30	40%	1,160	36,573	7,960	45,693	30.0%	152,311	19.3%	90.1%	32.5%	8,588
P5000	759,000	6.50%	30	40%	1,160	34,873	7,590	43,623	30.0%	145,411	25.8%	88.0%	32.8%	10,833
P4500	691,000	6.50%	30	35%	975	34,395	6,910	42,280	30.0%	140,933	25.8%	88.0%	32.8%	10,500
P3500	625,000	6.50%	30	35%	975	31,110	6,250	38,335	30.0%	127,782	25.8%	88.0%	32.8%	9,520
A1	676,000	6.50%	30	35%	975	33,648	6,760	41,383	30.0%	137,944	25.8%	88.0%	32.8%	10,277
A2	693,000	6.50%	30	35%	975	34,494	6,930	42,399	30.0%	141,331	25.8%	88.0%	32.8%	10,529
B1	551,000	6.50%	30	30%	830	29,536	5,510	35,876	30.0%	119,586	27.4%	87.5%	32.4%	9,266
B2	496,000	6.50%	30	25%	775	28,487	4,960	34,222	30.0%	114,073	27.4%	87.5%	32.4%	8,839
C1	572,000	6.50%	30	30%	830	30,662	5,720	37,212	30.0%	124,039	25.8%	88.0%	32.8%	9,241
D	491,000	6.50%	30	25%	775	28,200	4,910	33,885	30.0%	112,949	27.4%	87.5%	32.4%	8,752
E	420,000	6.50%	30	25%	775	24,122	4,200	29,097	30.0%	96,990	28.6%	88.1%	33.8%	8,263
F	394,000	6.50%	30	25%	775	22,629	3,940	27,344	30.0%	91,145	28.6%	88.1%	33.8%	7,765
G1	500,000	6.50%	30	25%	775	28,717	5,000	34,492	30.0%	114,972	27.4%	87.5%	32.4%	8,909
G2	487,000	6.50%	30	25%	775	27,970	4,870	33,615	30.0%	112,050	27.4%	87.5%	32.4%	8,682
H1	460,000	6.50%	30	25%	775	26,419	4,600	31,794	30.0%	105,981	27.4%	87.5%	32.4%	8,212
H2	475,000	6.50%	30	25%	775	27,281	4,750	32,806	30.0%	109,352	27.4%	87.5%	32.4%	8,473
I	456,000	6.50%	30	25%	775	26,189	4,560	31,524	30.0%	105,082	27.4%	87.5%	32.4%	8,142
Lofts	543,000	6.50%	30	30%	830	29,107	5,430	35,367	30.0%	117,890	27.4%	87.5%	32.4%	9,135
Senoirs 1	437,000	6.50%	30	25%	775	25,098	4,370	30,243	30.0%	100,811	27.4%	87.5%	32.4%	7,812
Senoirs 2	470,000	6.50%	30	25%	775	26,994	4,700	32,469	30.0%	108,228	27.4%	87.5%	32.4%	8,386
Senoirs 3	398,000	6.50%	30	25%	775	22,858	3,980	27,613	30.0%	92,045	28.6%	88.1%	33.8%	7,842
Senoirs 4	532,000	6.50%	30	30%	830	28,517	5,320	34,667	30.0%	115,558	27.4%	87.5%	32.4%	8,954

A-8.4

**Product Level Taxable Retail Expenditure spent per household in Unincorporated Los Angeles County outside Project Area –
by Community: MISSION VILLAGE**

Use Product	Unit Price	Interest (%)	Term (Years)	Down Payment (% of Price)	Insurance (\$/Yr.)	Mortgage (\$/Yr.)	Property Tax (\$/Yr.)	Housing Exp. (\$/Yr.)	Housing Share	Imputed HH Income (\$/Yr.)	Retail Exp./HH Less Auto Sales (% of HH Income)	Taxable Sale	In Uninc. LA County	
													% of Sales (%)	Amount (\$/Yr.)
Residential for Sale														
A2 SFD	843,500	6.50%	30	40%	1,160	38,756	8,435	48,351	30.0%	161,169	19.3%	90.1%	32.5%	9,087
A7 SFD	1,080,000	6.50%	30	45%	1,360	45,487	10,800	57,647	30.0%	192,157	19.3%	90.1%	32.5%	10,835
A8 Custom	2,509,000	6.50%	30	50%	1,650	96,066	25,090	122,806	30.0%	409,355	19.3%	90.1%	32.5%	23,081
SeniorsArea C (SFD)	616,000	6.50%	30	35%	975	30,662	6,160	37,797	30.0%	125,989	25.8%	88.0%	32.8%	9,386
A3a Duplex	507,500	6.50%	30	30%	830	27,204	5,075	33,109	30.0%	110,364	27.4%	87.5%	32.4%	8,552
A3b Towns-Flats	473,500	6.50%	30	25%	775	27,195	4,735	32,705	30.0%	109,015	27.4%	87.5%	32.4%	8,447
A4 Condo	422,500	6.50%	30	25%	775	24,265	4,225	29,265	30.0%	97,552	28.6%	88.1%	33.8%	8,311
A5 3/4 Plex Towns	504,500	6.50%	30	30%	830	27,043	5,045	32,918	30.0%	109,728	27.4%	87.5%	32.4%	8,502
A6 3 Story Towns	509,500	6.50%	30	30%	830	27,311	5,095	33,236	30.0%	110,788	27.4%	87.5%	32.4%	8,585
A9 Duplex	559,500	6.50%	30	30%	830	29,992	5,595	36,417	30.0%	121,389	25.8%	88.0%	32.8%	9,044
A10 Duplex	580,500	6.50%	30	30%	830	31,117	5,805	37,752	30.0%	125,841	25.8%	88.0%	32.8%	9,375
B1 Duplex	521,500	6.50%	30	30%	830	27,955	5,215	34,000	30.0%	113,332	27.4%	87.5%	32.4%	8,782
B2 3 Story Town	419,500	6.50%	30	25%	775	24,093	4,195	29,063	30.0%	96,877	28.6%	88.1%	33.8%	8,254
B6 Towns/Flats	415,500	6.50%	30	25%	775	23,863	4,155	28,793	30.0%	95,978	28.6%	88.1%	33.8%	8,177
B7	507,500	6.50%	30	30%	830	27,204	5,075	33,109	30.0%	110,364	27.4%	87.5%	32.4%	8,552
Senior C6 Flats	504,500	6.50%	30	30%	830	27,043	5,045	32,918	30.0%	109,728	27.4%	87.5%	32.4%	8,502
Senior Area C Duplex	597,500	6.50%	30	30%	830	32,029	5,975	38,834	30.0%	129,445	25.8%	88.0%	32.8%	9,644
D2 Towns 2/3 Story	428,500	6.50%	30	25%	775	24,610	4,285	29,670	30.0%	98,900	28.6%	88.1%	33.8%	8,426
F2a Live/Work 3 Story	671,500	6.50%	30	35%	975	33,424	6,715	41,114	30.0%	137,047	25.8%	88.0%	32.8%	10,210
F2b Condo 4/5 Story	478,500	6.50%	30	25%	775	27,482	4,785	33,042	30.0%	110,139	27.4%	87.5%	32.4%	8,534
F3a Live/Work 3 Story	671,500	6.50%	30	35%	975	33,424	6,715	41,114	30.0%	137,047	25.8%	88.0%	32.8%	10,210
F3b Condo 4/5 Story	495,500	6.50%	30	25%	775	28,458	4,955	34,188	30.0%	113,960	27.4%	87.5%	32.4%	8,830
F5a Condo 4/5 Story	453,500	6.50%	30	25%	775	26,046	4,535	31,356	30.0%	104,520	27.4%	87.5%	32.4%	8,099
F5b Condo 4/5 Story	411,500	6.50%	30	25%	775	23,634	4,115	28,524	30.0%	95,079	28.6%	88.1%	33.8%	8,101
F6a Condo 4 Story	470,500	6.50%	30	25%	775	27,022	4,705	32,502	30.0%	108,341	27.4%	87.5%	32.4%	8,395
F6b Condo 4 Story	478,500	6.50%	30	25%	775	27,482	4,785	33,042	30.0%	110,139	27.4%	87.5%	32.4%	8,534
F7 Condo 3 Story	428,500	6.50%	30	25%	775	24,610	4,285	29,670	30.0%	98,900	28.6%	88.1%	33.8%	8,426
F8a Condo 3/4 Story	419,500	6.50%	30	25%	775	24,093	4,195	29,063	30.0%	96,877	28.6%	88.1%	33.8%	8,254
F8b Condo 3/4 Story	402,500	6.50%	30	25%	775	23,117	4,025	27,917	30.0%	93,056	28.6%	88.1%	33.8%	7,928

A-8.5

**Product Level Taxable Retail Expenditure spent per household in Unincorporated Los Angeles County outside Project Area –
by Community: LEGACY**

Use Product	Unit Price	Interest (%)	Term (Years)	Down Payment (% of Price)	Insurance (\$/Yr.)	Mortgage (\$/Yr.)	Property Tax (\$/Yr.)	Housing Exp. (\$/Yr.)	Housing Share	Imputed HH Income (\$/Yr.)	Retail Exp./HH Less Auto Sales (% of HH Income)	Taxable Sale	In Uninc. LA County	
													% of Sales (%)	Amount (\$/Yr.)
Residential for Sale														
A1 - Triplex	453,000	6.50%	30	25%	775	26,017	4,530	31,322	30.0%	104,407	27.4%	87.5%	32.4%	8,090
A2 - 45x100	510,000	6.50%	30	30%	830	27,338	5,100	33,268	30.0%	110,894	27.4%	87.5%	32.4%	8,593
A3 - Triplex	453,000	6.50%	30	25%	775	26,017	4,530	31,322	30.0%	104,407	27.4%	87.5%	32.4%	8,090
A4 - 55x110	624,000	6.50%	30	35%	975	31,060	6,240	38,275	30.0%	127,583	25.8%	88.0%	32.8%	9,505
A5 Luxury Flats	510,000	6.50%	30	30%	830	27,338	5,100	33,268	30.0%	110,894	27.4%	87.5%	32.4%	8,593
A6 - 45x100	510,000	6.50%	30	30%	830	27,338	5,100	33,268	30.0%	110,894	27.4%	87.5%	32.4%	8,593
A7 - 60x110	682,000	6.50%	30	35%	975	33,947	6,820	41,742	30.0%	139,139	25.8%	88.0%	32.8%	10,366
A8 - 50x105	615,000	6.50%	30	35%	975	30,612	6,150	37,737	30.0%	125,789	25.8%	88.0%	32.8%	9,372
A9 - 50x105	615,000	6.50%	30	35%	975	30,612	6,150	37,737	30.0%	125,789	25.8%	88.0%	32.8%	9,372
A10 - 55x110	624,000	6.50%	30	35%	975	31,060	6,240	38,275	30.0%	127,583	25.8%	88.0%	32.8%	9,505
A11 - 60x110	682,000	6.50%	30	35%	975	33,947	6,820	41,742	30.0%	139,139	25.8%	88.0%	32.8%	10,366
A12 - 45x100	428,000	6.50%	30	25%	775	24,581	4,280	29,636	30.0%	98,788	28.6%	88.1%	33.8%	8,416
A13 - Duplex	472,000	6.50%	30	25%	775	27,108	4,720	32,603	30.0%	108,678	27.4%	87.5%	32.4%	8,421
B3 - Condos	433,000	6.50%	30	25%	775	24,869	4,330	29,974	30.0%	99,912	28.6%	88.1%	33.8%	8,512
B4 - Condos	483,000	6.50%	30	25%	775	27,740	4,830	33,345	30.0%	111,151	27.4%	87.5%	32.4%	8,613
B6 - Condos	483,000	6.50%	30	25%	775	27,740	4,830	33,345	30.0%	111,151	27.4%	87.5%	32.4%	8,613
B8 Temp School	910,000	6.50%	30	40%	1,160	41,811	9,100	52,071	30.0%	173,571	19.3%	90.1%	32.5%	9,787
B9 - Condos	462,000	6.50%	30	25%	775	26,534	4,620	31,929	30.0%	106,430	27.4%	87.5%	32.4%	8,247
B10 - Condos	438,000	6.50%	30	25%	775	25,156	4,380	30,311	30.0%	101,036	27.4%	87.5%	32.4%	7,829
B11 - Condos	420,000	6.50%	30	25%	775	24,122	4,200	29,097	30.0%	96,990	28.6%	88.1%	33.8%	8,263
B12 - Condos	387,000	6.50%	30	25%	775	22,227	3,870	26,872	30.0%	89,572	28.6%	88.1%	33.8%	7,631
C1a - 45x100	510,000	6.50%	30	30%	830	27,338	5,100	33,268	30.0%	110,894	27.4%	87.5%	32.4%	8,593
C1b - 45x100	510,000	6.50%	30	30%	830	27,338	5,100	33,268	30.0%	110,894	27.4%	87.5%	32.4%	8,593
C2a - 50x100	649,000	6.50%	30	35%	975	32,304	6,490	39,769	30.0%	132,564	25.8%	88.0%	32.8%	9,876
C2b - 45x100	510,000	6.50%	30	30%	830	27,338	5,100	33,268	30.0%	110,894	27.4%	87.5%	32.4%	8,593
C3 - 60x100	663,000	6.50%	30	35%	975	33,001	6,630	40,606	30.0%	135,353	25.8%	88.0%	32.8%	10,084
C4 - 60x100	663,000	6.50%	30	35%	975	33,001	6,630	40,606	30.0%	135,353	25.8%	88.0%	32.8%	10,084
D - SFR	1,237,500	6.50%	30	45%	1,360	52,121	12,375	65,856	30.0%	219,518	19.3%	90.1%	32.5%	12,377

A-8.6

**Product Level Taxable Retail Expenditure spent per household in Unincorporated Los Angeles County outside Project Area –
by Community: LANDMARK**

Use Product	Unit Price	Interest (%)	Term (Years)	Down Payment (% of Price)	Insurance (\$/Yr.)	Mortgage (\$/Yr.)	Property Tax (\$/Yr.)	Housing Exp. (\$/Yr.)	Housing Share	Imputed HH Income (\$/Yr.)	Retail Exp./HH Less Auto Sales (% of HH Income)	Taxable Sale	In Uninc. LA County	
													% of Sales (%)	Amount (\$/Yr.)
Residential for Sale														
Area D Alley	564,000	6.50%	30	30%	830	30,233	5,640	36,703	30.0%	122,343	25.8%	88.0%	32.8%	9,115
Area E Alley	623,000	6.50%	30	35%	975	31,010	6,230	38,215	30.0%	127,383	25.8%	88.0%	32.8%	9,490
Area F Alley	674,000	6.50%	30	35%	975	33,549	6,740	41,264	30.0%	137,545	25.8%	88.0%	32.8%	10,247
Area G SFD	755,000	6.50%	30	40%	1,160	34,690	7,550	43,400	30.0%	144,665	25.8%	88.0%	32.8%	10,778
Area H SFD	816,000	6.50%	30	40%	1,160	37,492	8,160	46,812	30.0%	156,041	19.3%	90.1%	32.5%	8,798
Area A Condo	420,000	6.50%	30	25%	775	24,122	4,200	29,097	30.0%	96,990	28.6%	88.1%	33.8%	8,263
Area B Condo	470,000	6.50%	30	25%	775	26,994	4,700	32,469	30.0%	108,228	27.4%	87.5%	32.4%	8,386
Area C Condo	521,000	6.50%	30	30%	830	27,928	5,210	33,968	30.0%	113,226	27.4%	87.5%	32.4%	8,774

A-8.7
Consumer Expenditure Survey (CES) Methodology for estimating shares of
Retail Expenditure & Taxable Sales by Household Income Categories
(Per 2004 CES, adjusted for 2004-06 inflation in individual categories)

Item (2006)	All consumer units	Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$19,999	\$20,000 to \$29,999	\$30,000 to \$39,999	\$40,000 to \$49,999	\$50,000 to \$69,999	\$70,000 to \$79,999	\$80,000 to \$99,999	\$100,000 to \$119,999	\$120,000 to \$149,999	\$150,000 and more
Income before taxes	\$ 56,258	\$ 1,133	\$ 8,071	\$ 12,913	\$ 17,994	\$ 25,588	\$ 35,890	\$ 46,125	\$ 61,223	\$ 76,904	\$ 91,755	\$ 112,356	\$ 136,677	\$ 235,579
Income after taxes	54,020	1,216	8,059	13,037	18,059	25,103	35,333	45,137	59,015	74,630	87,698	107,242	128,392	219,657
Average annual expenditures	46,113	18,096	15,510	20,662	24,465	29,479	35,357	40,597	50,741	58,458	69,545	79,924	92,767	126,931
Less:														
Housing	14,864	6,728	6,029	8,024	8,939	10,294	11,900	13,224	15,698	18,606	21,783	23,786	28,129	38,709
	22.4%	519.0%	67.0%	55.3%	43.3%	35.4%	28.4%	24.5%	21.8%	20.5%	20.0%	17.5%	16.7%	13.3%
Transportation	6,815	1,736	1,573	2,437	3,070	4,311	5,335	5,944	8,511	8,607	11,075	12,160	14,095	17,288
Health care	2,790	960	1,269	1,958	2,179	2,338	2,583	2,766	3,115	3,283	3,668	4,045	4,132	4,966
Education	1,018	1,151	716	556	431	355	355	469	794	1,057	1,732	2,098	2,436	4,929
Cash contributions	1,408	276	213	414	828	738	844	1,284	1,360	1,551	2,052	2,445	2,672	7,037
Personal insurance and pensions	4,823	261	282	533	951	1,594	2,692	3,656	5,430	7,099	8,871	11,284	14,178	18,927
Plus:														
Housekeeping Supplies	613	335	230	326	411	393	529	559	666	699	889	921	1,085	1,508
Household furnishings and equipment	1,666	511	391	551	733	853	1,175	1,361	1,692	2,110	2,569	3,162	4,224	5,836
Drugs	520	229	312	505	511	516	537	525	529	554	572	617	644	682
Gasoline & Motor Oil	2,090	902	811	1,023	1,261	1,556	1,873	2,120	2,554	2,787	738	752	857	735
Vehicle Maintenance & Repairs	716	258	253	283	541	465	602	627	829	912	1,151	1,190	1,348	1,519
Retail Expenditure except Auto Sales	\$ 20,000	\$ 9,214	\$ 7,423	\$ 9,428	\$ 11,523	\$ 13,631	\$ 16,362	\$ 18,445	\$ 22,102	\$ 25,315	\$ 26,284	\$ 30,748	\$ 35,282	\$ 45,355
Retail as % of Income before Taxes	35.6%	813.0%	92.0%	73.0%	64.0%	53.3%	45.6%	40.0%	36.1%	32.9%	28.6%	27.4%	25.8%	19.3%
Food at home	3,500	2,123	1,773	2,202	2,547	2,710	3,196	3,413	3,807	4,266	4,228	5,244	5,796	6,108
Non-Taxable Share <i>(Assumes 70% Food Store Expenses & 30% Drug Store Expenses as Non-Taxable)</i>	2,606	1,555	1,335	1,693	1,936	2,052	2,398	2,546	2,824	3,152	3,132	3,856	4,250	4,480
Non-Taxable as % of Retail Expenditure	13.0%	16.9%	18.0%	18.0%	16.8%	15.1%	14.7%	13.8%	12.8%	12.5%	11.9%	12.5%	12.0%	9.9%
Taxable Sales as % of Retail Expenses	87.0%	83.1%	82.0%	82.0%	83.2%	84.9%	85.3%	86.2%	87.2%	87.5%	88.1%	87.5%	88.0%	90.1%
Expenditure in Uninc. Area Outside Newhall	\$ 6,102	\$ 2,654	\$ 2,189	\$ 2,857	\$ 3,570	\$ 4,261	\$ 4,968	\$ 5,592	\$ 6,794	\$ 7,645	\$ 8,875	\$ 9,954	\$ 11,577	\$ 14,739
% in Uninc. as % of Retail Exp.	30.5%	28.8%	29.5%	30.3%	31.0%	31.3%	30.4%	30.3%	30.7%	30.2%	33.8%	32.4%	32.8%	32.5%

APPENDIX E

Cultural/Paleontological Resources

Letter from W&S Consultants
February 15, 2007

W and S CONSULTANTS / cultural resources management studies

February 15, 2007

Mr. Glenn Adamick
Newhall Land
23823 Valencia Boulevard
Valencia, CA 91355

RE: Response to Issues Raised with the Landmark Draft EIR Cultural Resources Report

Dear Mr. Adamick:

I am writing in response to issues raised with language contained within the Landmark Village Cultural Resources Report included in the Landmark Village Draft EIR, specifically Section 2.2 Ethnographic Description on page 7 of Appendix 4.22a-1.

In the above referenced section, W&S stated in the first paragraph "...as the Tataviam are now extinct and were effectively so prior to the initiation of systematic anthropological studies at the turn of the century." As reference, we cited a report prepared by Drs. Chester King and Thomas Blackburn (published in The Handbook of North American Indians, Vol. 8, California, R. Heizer, editor, pp. 535-537, Smithsonian Institution, 1978).

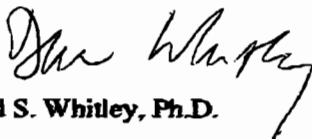
W&S would like to personally apologize to the Tataviam Tribe for this inaccurate statement and reference. In fact, the next sentence of the above referenced section states "...the Tataviam are generally accepted as the aboriginal inhabitants of the region."

W&S Consultants has always been supportive of the local tribal groups, including the Tataviam, and recognizes the importance of their continuing cultural traditions, their connections to their traditional sites, and their involvement in the planning process. We know that Newhall Land shares in this commitment.

The language in Section 2.2 will be amended to reflect the existence of the Tataviam Tribe and the reference from the Handbook of North American Indians, Vol. 8, California will be removed from the Landmark Village Cultural Resources Report and replaced with Dr. King's *Ethnographic Overview of the Angeles National Forest, Tataviam and San Gabriel Mountain Serrano Ethnohistory* (2004).

We value our relationship with the Tataviam and look forward to continued collaboration with them in the future.

Sincerely,



David S. Whitley, Ph.D.

cc: Rudy Ortega Jr., Fernandeno Tataviam Band of Mission Indians
Susan Tebo, Impact Sciences
Daniel Fierros, Department of Regional Planning

APPENDIX F

Land Use

Sustainability In Action

LANDMARK VILLAGE



SUSTAINABLE COMMUNITY DESIGN

Landmark Village's balance of new homes, jobs, environmental preservation and transportation solutions showcase the sustainable community design attributes found throughout Newhall Ranch.

As proposed, Landmark Village's 300 acres would include a diverse range of 1,444 new homes for all socio-economic levels. To minimize and shorten car trips, most homes will be within walking distance to the community's commercial and mixed-use areas, elementary school site, community park, trails and natural open space.

Green Building Program

=15% percent better than existing Title 24 requirements

1. All Residential Buildings
 - Improved insulation and ducting
 - Low E glass
 - High efficiency A/C
 - Radiant barrier in attic – as needed to achieve standard
2. All Commercial and Public Buildings
 - Improved insulation and ducting
 - Low E glass
 - High efficiency HVAC equipment
 - Energy efficient lighting design with occupancy sensors

Water Conservation (Community Wide)

- Water efficient fixtures in homes, commercial, and public buildings
- Drought tolerant landscaping
- Use of recycled water for irrigation
- Use of local ground water for potable supply
- Evapo-transpiration irrigation systems (smart sprinklers)



Renewable Energy

Explore and identify renewable energy sources for Newhall Ranch (including Landmark Village). Renewable energy sources could include solar, wind, cogeneration and other feasible sources.



Reduce Impermeable Surfaces / Water Re-use

To curtail urban runoff and maximize groundwater recharge, Landmark will utilize open/soft bottom channels, smaller street sections and natural water quality treatment basins. These water quality features will aid percolation of the groundwater recharging process.



Walkability

Landmark Village's design connects jobs, shops, schools, parks and recreation facilities with the community's trail system to promote walking and biking while minimizing car trips.





Recreation

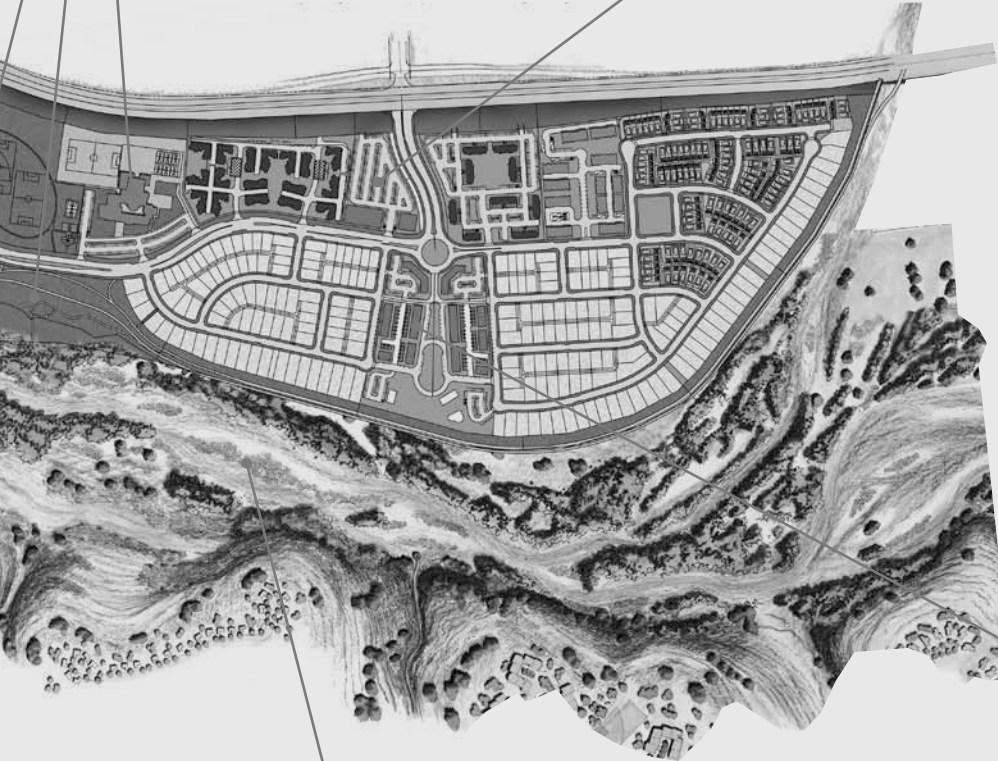
Landmark's sustainable design includes parks for people to play, a neighborhood recreation center to exercise and a two-mile extension of the popular Santa Clara River Trail. The variety of recreational options will allow residents to enjoy an environmentally sustainable way of life.



Transportation Solutions

Landmark's circulation plan can be a model for how to minimize car trips and reduce carbon-dioxide emissions.

- **Convenient mass transit** would be offered through a new transit station, a park-and-ride lot and bus stops. A five-mile right-of-way for a potential Metrolink extension is also included in the plan.
- Trails and bike paths leading to close-to-home jobs, neighborhood serving retail and the school will encourage residents to **leave their cars behind**.
- Newhall Land's commitment to fund \$300 million in roadway improvements in the Santa Clarita Valley (in conjunction with Newhall Ranch) will keep traffic moving.



Economy

A number of Newhall Ranch's projected 19,000 new jobs will be offered through Landmark's 37 acres (approximately 1 million sq ft) of mixed-use and commercial areas. A strong local job base is a critical component of sustainable communities because it offers the quality of life and environmental benefits of allowing people to work close to home, while generating tax revenue.

Protection of Natural Resources

As it passes by Landmark Village, the long-term health of the Santa Clara River will be protected with environmentally sensitive bank stabilization and development buffers to preserve the river's natural beauty, its native species, wildlife corridor and water quality.



Environmentally Sustainable Living

OVER 50% OF NEWHALL RANCH WILL BE PRESERVED AS OPEN SPACE:

High Country preserve 4,200 acres

Santa Clara River
Corridor 1,000 acres

Open space areas
within villages 1,100 acres

Salt Creek Corridor
on the western edge of
Newhall Ranch 1,500 acres

**Total open space set
aside as a result of
Newhall Ranch 7,800 acres**



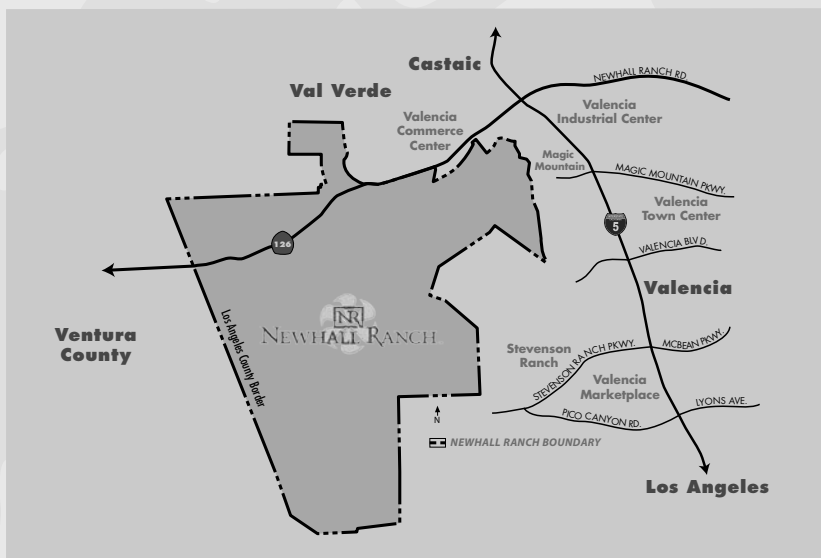
Photograph by Ted Dayton

A WALKABLE COMMUNITY: Newhall Ranch's sustainable design connects jobs, shops, schools, parks and recreation facilities with the community's trail system to encourage residents to leave their cars behind.

Landmark is the first of four planned villages, which will combine to form Newhall Ranch, with its 19,000 new jobs and 21,000 new-home choices, and environmentally sensitive design which permanently preserves 50 percent of the 12,000-acre property.

Much like Newhall Land's renowned community of Valencia, Newhall Ranch will be a sustainable new town thanks to its focus on all aspects of life – from social to economic to the natural environment.

- * The Newhall Ranch Nature Preserve protects **high quality habitat**
- * An ideal location **near existing jobs and infrastructure**
- * A **broad range of homes** for every stage of life
- * A **mix of land uses** including commercial, office and public facilities
- * The creation of **19,000 jobs**
- * Recycled water to meet 51 percent of all water needs: Independent (non State Water Project water) supplies to meet potable water needs
- * Drought tolerant native landscaping and evapotranspiration controllers (smart sprinklers) substantially reducing irrigation needs
- * Car trips minimized by **convenient mass transit** and by placing homes near jobs and neighborhood retail centers
- * Significant improvements to SR-126, I-5 and other local roadways to **reduce traffic congestion** and improve mobility



IDEAL LOCATION: Newhall Ranch is the logical, close-in location for a new master-planned community because it is adjacent to major job centers, existing infrastructure and development.

The information depicted and written about in this document is subject to change and modification.

NEWHALL RANCH AFFORDABLE HOUSING IMPLEMENTATION PLAN

Last Update: September 18, 2007

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1. SUMMARY OF AFFORDABLE HOUSING IMPLEMENTATION PLAN

This Affordable Housing Implementation Plan ("Implementation Plan") is based on the Affordable Housing Program adopted in May 2003, as part of the Newhall Ranch Specific Plan (section 3.10 Development Regulations/Affordable Housing Program, attached hereto as Appendix B) (the "Affordable Housing Program"). The Implementation Plan specifics may be modified or changed as development of the Newhall Ranch community unfolds. The basic plan calls for affordability guidelines, timing/delivery plans and monitoring obligations as summarized below:

A. Affordability Minimums

The Newhall Ranch will include a total of 2200 affordable homes or 10% of the total development, according to the following income schedule:

- (1) 1210 homes shall be moderate income units (moderate income is defined as households with incomes at or below 120% of Los Angeles County median income)
- (2) 220 homes shall be low income units serving households with income at or below 80% of Los Angeles County median income
- (3) 330 homes shall be low income units serving households with income at or below 65% of Los Angeles County median income
- (4) 440 homes shall be very low income units (very low income is defined as 0%-50% of Los Angeles County median income). A minimum of 44 of these units will be reserved for seniors 62 years of age or older.

B. Delivery of Units

The timing of the provision of the affordable homes is as follows:

- (1) For the first 11,000 homes in the Newhall Ranch, 1100 affordable homes will be provided.
- (2) At the completion of 16,500 homes, 1650 affordable homes will be provided.
- (3) When 20,000 homes are completed at the Newhall Ranch, all 2200 affordable homes cumulative will be in place.

C. Monitoring

The affordable housing program specifies a monitoring program as follows:

- (1) At the time of the submittal of the tentative tract map for the 5000th home, the Newhall Land and Farming Company will begin submitting annual reports until completion of the 2200th affordable unit.
- (2) As units are completed, the owners and managers of the units will take over reporting responsibilities. Newhall Land and Farming Company will continue to report annually on units in planning and under construction until the 2200th unit is occupied.

2. NEWHALL LAND AND FARMING COMPANY RESPONSIBILITIES

Newhall Land and Farming Company ("Newhall Land") will provide affordable housing on the Newhall Ranch according to the Affordable Housing Program. These obligations include:

- A. Newhall Land agrees to implement the Affordable Housing Program as approved.
- B. Newhall Land will provide a mix of for sale and rental housing per the Affordable Housing Program.

- C. Newhall Land will provide a mix of housing for all income levels per the Affordable Housing Program.
- D. Newhall Land will disperse affordable homes in 8-15 developments spread throughout the four Newhall Ranch communities of Landmark Village, Mission Village, Homestead and Potrero.
- E. Newhall Land will provide a fifteen-year resale control program for homes offered for sale under the Affordable Housing Program.
- F. Newhall Land will provide that all affordable rental homes will maintain affordable monthly rents for at least 15 years.
- G. Newhall Land will sell land for development of these affordable units to qualified affordable housing developers. Those developers will be responsible for coordinating long-term monitoring or assistance from the Los Angeles County Community Development Commission
- H. Newhall Land will implement the agreed upon monitoring program for units in planning or under construction.

3. NEWHALL RANCH DEVELOPMENT SCHEDULE

It is anticipated that the Newhall Ranch will be developed in four villages, with each of the four villages having its own tentative map. The number and location of affordable homes will be submitted, for each map, at the time of map submission.

A. The proposed number of affordable homes for each Village is still being determined as part of the master planning process, but is expected to be within the following ranges:

- 1. Landmark Village
250-350 affordable homes
- 2. Mission Village
500-800 affordable homes
- 3. Homestead
700-1000 affordable homes
- 4. Potrero
300-500 affordable homes

B. The number of affordable homes per Village may be adjusted through the approval process, but the total number of affordable homes within the Newhall Ranch will remain at 10% of the total development (currently calculated to be 2200).

C. With the filing of each village's tentative map, Newhall Land will provide an affordable housing plan for that village indicating the type of affordable housing, rental or for-sale, income level to be served (moderate, low, or very-low), and location within the community. This Village

Affordable Housing Plan will be incorporated as an appendix to the Affordable Housing Implementation Plan.

4. AFFIRMATIVE MARKETING PROGRAM

In order to assure opportunities for local residents and employees to obtain affordable housing, Newhall Land will implement an affirmative marketing program.

A. A marketing plan, that includes an affirmative marketing program, will be written for each affordable development before lease-up or sales of units begin. The Marketing Plan will be submitted to the Los Angeles County Community Development Commission for review and approval.

B. Each Marketing Plan will include provisions for the activities outlined below:

(1) Advertising

Although word of mouth and employer outreach may be sufficient to find qualified occupants of the affordable homes, some advertising may be required. If advertising is necessary, the program may include but is not limited to

- a) Newspaper advertising
- b) Informational flyers to local employers and local government agencies
- c) On-site signage.

(2) Application Process

- a) After receipt of building permits and prior to the release of applications, each Village will set up a method for prospective applicants to register their interest. Once applications become available, they will be mailed to all registered applicants.
- b) Once released, applications will also be available for pick-up from the leasing or sales office, as applicable.

(3) Eligibility

- a) Units will be offered to applicants on a first qualified, first offered basis.

C. Newhall Land and its sales and rental agents hereby agree not to discriminate against any housing prospect on the basis of race, gender, color, religion, creed, marital status, ancestry, or national origin. All advertising and informational flyers in villages with affordable homes may include information about affordable housing as well as fair housing information.

5. HOMEOWNERSHIP FINANCING

A. Initial Price Determination

In approximately April of each year, when current annual Los Angeles County income limit information is available from the U. S. Department of Housing and Urban Development for that year, Newhall Land will determine the sales price and rental rates of affordable homes according to the formula indicated in the Affordable Housing Program.

B. Financing Programs

Newhall Land will use a variety of financing programs to assist buyers to achieve homeownership. These programs may include CalFHA, VA/FHA, County Buyer assistance programs, local employer assistance programs, and lender programs.

C. Preferred Lenders

Newhall Land will designate a preferred lender to assist in buyer qualification. This lender will receive a copy of the implementation plan and will demonstrate, to the satisfaction of the developer, knowledge of financing programs for affordable housing. All buyer/applicants may be required to use the preferred lender for qualification purposes. Buyers may use a lender of their choice for their mortgage financing.

6. TERM OF RESTRICTIONS

A. FOR SALE

The adopted Affordable Housing Program does not include resale controls or restrictions on ownership housing. However, in order to avoid speculation, Newhall Land proposes a fifteen-year resale control on all ownership homes.

Any sales within the first fifteen years will be restricted to households within a fixed band of qualifying incomes. These restricted resales will be achieved through a third party monitoring company and deed restrictions recorded on title. The qualifying incomes may rise over time, depending on how long the seller has occupied the home, interest rates at the time of sale, and the existence and size of any secondary mortgages.

The purpose of allowing qualifying incomes to rise over time include:

1. To prevent the Seller from losing money at the sale. The circumstances under which this could happen are illustrated via an example in Exhibit A of this Plan.
2. To provide some share of appreciation on value to the Seller. This share will be larger depending on how long the Seller has occupied the home. The general guidelines that Newhall Land will follow in making this determination will be as follows:

Term of Occupancy	Share of Appreciation
5 years	25%
10 years	50%
15 years or more	100%

Such sharing of appreciation and resulting increases in qualifying income for subsequent buyers will be permitted at Newhall Land's sole discretion.

Prior to the issuance of the first building permit, Newhall Land will provide a sample resale control document to the Los Angeles County Community Development Commission for its review and approval. This document will be provided to prospective buyers on the website as well as individually when sale agreements are signed.

B. RENTAL

In accordance with the adopted Affordable Housing Program, all affordable rental homes will maintain affordable monthly rents for at least 15 years. Newhall Land will provide all potential rental housing operators with a copy of this Implementation Plan. Each operator will acknowledge receipt of The Affordable Housing Implementation Plan in writing.

Prior to occupancy of the first home in each affordable rental community, 15 year rent restrictions will be in place in accordance with the Affordable Housing Program.

7. MONITORING PROGRAM

Newhall Land will begin providing annual reports to the County of Los Angeles Regional Planning Department with a copy to the Los Angeles County Community Development Commission on March 1 in the year following the submittal of the tentative map for the 5000th home, or following the occupancy of the first affordable home, whichever is earlier. The report will contain the following information for each village for which a tentative map has been submitted:

- A. Number of affordable homes in each village.
- B. Location of affordable homes in each village.
- C. Income level (very low, low, moderate) achieved for each affordable home in each village.
- D. Indication for each home whether it is for-sale or rental by village.
- E. Indication of initial sales price or monthly rent for each home by village.
- F. Cumulative number of affordable homes provided in all villages.

8. COUNTY OF LOS ANGELES RESPONSIBILITIES

- A. County will designate an employee to receive annual monitoring reports.
- B. County will assist developer in finding a designee at the Los Angeles County Community Development Commission to receive annual monitoring reports.

EXHIBIT A – For Sale Income Banding Example

The following page outlines the finances of a hypothetical family who purchases an income restricted home in the year 2007. The exhibit makes certain assumptions about median income growth over time, and interest rates at time of purchase and resale. It uses these assumptions to project the amount the family will pay for their home and the amount they will be able to sell it for after a certain period of time (in this case, 5 years). The case below shows a scenario in which the family is close to “break-even”, meaning they do not suffer a major loss, or receive a huge windfall of money. The determination of profit or loss below does not take into account benefits such as mortgage interest deductions and others that the family may receive during the time they own the home.

While the income restrictions on these homes will end after 15 years, some families will be required, due to employment or personal reasons, to sell before year 15. When this occurs, they will be required to sell to another income-eligible family. Depending on income growth during the years between their purchase and re-sale, and interest rates at the time of the re-sale, the original family could potentially lose money when they sell the home.

In order to prevent a major loss by a very-low, low or moderate income family, Newhall Land reserves the right to relax the affordability requirements, on a case by case basis, in order to allow families to break-even on resale.

The third-party monitor designated to manage the re-sale process will advise and assist Newhall Land with these decisions.

Re-Sale Income Banding Example

Assumptions:

2 Bedrooms	\$250 Monthly HOA
3 Person HH	1.10% Tax Rate
120% AMI	0.25% Insurance
3% Downpayment	33.00% Debt Ratio

Initial Sale Structure:

2007 Qualifying Income:	\$74,880
Funds for Housing Costs (30% of Income):	\$24,710.40 (annual)
HOA Costs:	\$3,000 (annual)
Taxes & Insurance:	1.35%
<i>Mortgage Rate (30 year fixed):</i>	<i>6.25%</i>
Monthly Funds Available for Loan, Taxes, Ins:	\$1,809.20
Monthly Taxes & Insurance:	\$279.50
Supportable Mortgage:	\$248,442
Downpayment (3%):	\$7,453
TOTAL ORIGINAL PURCHASE PRICE:	\$255,896

Re-Sale Conditions:

Years Later:	5 years
<i>Income Growth:</i>	<i>2% per annum</i>

Re-Sale Requirements:

New Qualifying Income:	\$82,674 per year
Funds Available for Housing Costs:	\$27,282.28 (annual)
HOA Costs:	\$3,000 (annual)
Taxes & Insurance:	1.35%
<i>Mortgage Rate:</i>	<i>7.00%</i>
Monthly Funds Available for Loan, Taxes, Ins:	\$2,023.52
Monthly Taxes & Insurance:	\$292.68
Supportable Mortgage:	\$260,159
Downpayment:	\$7,805
TOTAL RESALE PURCHASE PRICE:	\$267,964

Closing Costs:

5% of sales price
\$13,398 total costs for sale

Net Money to Seller:	\$254,566
PROCEEDS TO SELLER:	<u>(\$1,330)</u>

APPENDIX A – Affordable Housing Development Projects & Locations

Newhall Land: Affordable Housing at Newhall Ranch Affordable Housing Development Projects & Locations

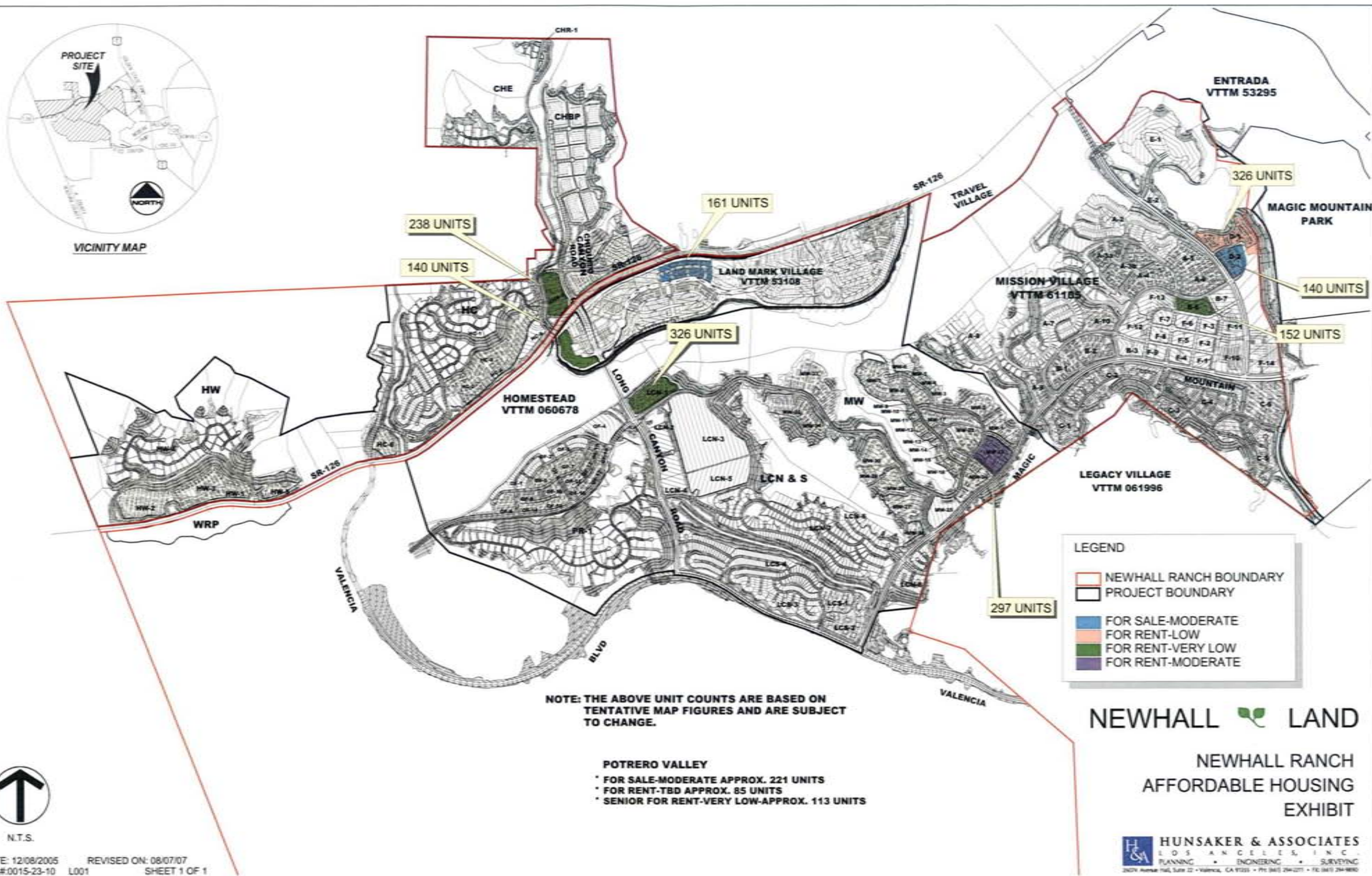
As Of: July 23, 2007

Community	Residential Home Sites (apprx)	Affordable Homes	For Sale	For Rent	Senior For Sale	Senior For Rent
Landmark	1,444	301	A-1 161 Moderate <i>Newhall Note</i> (81%-120%)	A-2 140 Very Low 4% TC, Bonds, MHP (0% - 60%)		
Mission Village	5,331	618	A-4 140 Moderate <i>Newhall Note</i> (81%-120%)	A-5 152 Very Low 4% TC, Bonds, MHP (0% - 60%) A-3 326 Low <i>Private Equity</i> (61% - 80%)		
Homestead	5,690	861		A-6 297 Moderate <i>Private Equity</i> (81% - 120%) A-7 326 Very Low 9% Tax Credits (0% - 60%) A-8 238 Very Low 9% Tax Credits (0% - 60%)		
Potrero	8,420	420	TBD 221 Moderate <i>Newhall Note</i> (81% - 120%)	TBD 86 TBD		TBD 113 Very Low 9% Tax Credits (0% - 50%)
Totals	20,885	2,200	522	1,565	0	113

APPENDIX A – Master Affordable Housing Map



VICINITY MAP



N.T.S.

APPENDIX A cont'd

A. Landmark Village Affordable Housing Plan

The Landmark community will contain 301 affordable homes located within the development. There will be two affordable programs within this community, moderate income for-sale homes, and very-low income family rentals.

1. FOR SALE HOMES FOR MODERATE INCOME FAMILIES

161 homes will be provided for moderate income (81-120% of Los Angeles County median income, adjusted for family size) families. These homes will be located in area A-1 per the attached map. This location is especially appropriate because of its access to transportation services and Highway 126, and its proximity to an elementary school, park, and commercial services.

2. RENTAL HOMES FOR VERY-LOW INCOME FAMILIES

140 rentals will be provided for very low income (0-50% of Los Angeles County Median Income, adjusted for family size) families in Area A-2. This location also has excellent access to schools, parks and commercial services.

B. Mission Village Affordable Housing Plan

Mission Village will contain 618 affordable homes in 4 different locations. There will be Moderate Income family for Sale, and two levels of Rentals: Low Income family and Very Low Income family.

1. FOR SALE HOMES FOR MODERATE INCOME FAMILIES

140 homes for moderate income (81-120% of Los Angeles County Median Income, adjusted for family size) families will be located in area A-4. Area A-4 is next to a park and near a commercial center with a school and recreation center within a mile.

2. RENTAL HOMES FOR LOW INCOME FAMILIES

326 homes will be provided for low-income (66-80% of Los Angeles County median income, adjusted for family size) families. All of these units will be located in Area A-3. Area A-3 is next to A-4, with the same amenities nearby.

3. RENTAL UNITS FOR VERY LOW INCOME FAMILIES

152 Units will be provided for very low income (0-60% of Los Angeles County median income, adjusted for family size). These units will be located in area A-5. Area A-5 is across the street from a school, near commercial services, a recreation center and a park.

C. Homestead Affordable Housing Plan

Homestead will contain 861 affordable homes in 3 locations. They will be rented to Moderate Income and Very Low Income Families.

1. RENTAL HOMES FOR MODERATE INCOME FAMILIES

297 homes for moderate income (81-120% of Los Angeles County Median Income, adjusted for family size) families will be located in area A-6. Area A-6 is near a school and designated open space.

2. RENTAL UNITS FOR VERY LOW INCOME FAMILIES

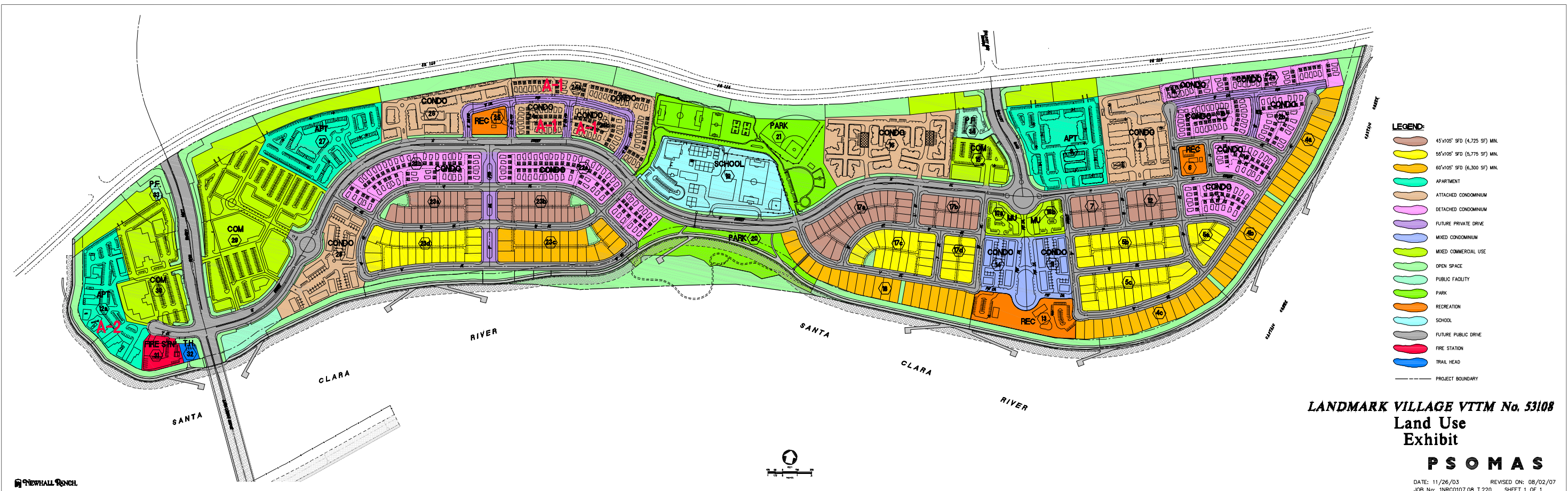
564 Units will be provided for very low income (0-60% of Los Angeles County median income, adjusted for family size). These units will be located in areas A-7 and A-8. Area A-7 is next to a school and near parks and open space and Area A-8 is near a park and commercial services.

D. Potrero Affordable Housing Plan

To be provided with filing of tentative map

The following pages include site plans for available communities (as of this writing Potrero was not available), with the location of the affordable housing sites noted.

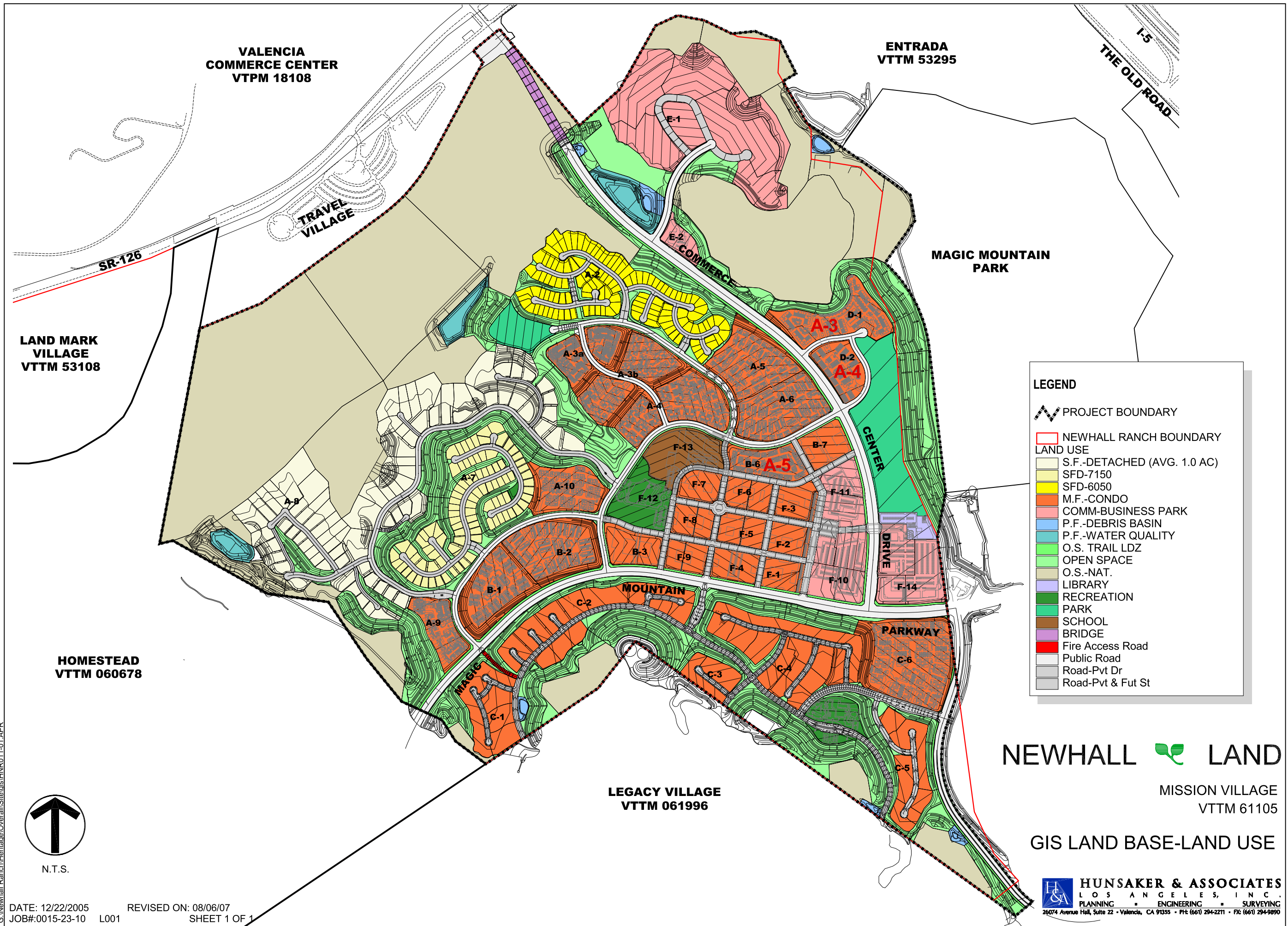
APPENDIX A – Landmark Affordable Housing Map



- LEGEND:**
- 45'x105' SFD (4,725 SF) MIN.
 - 55'x105' SFD (5,775 SF) MIN.
 - 60'x105' SFD (6,300 SF) MIN.
 - APARTMENT
 - ATTACHED CONDOMINIUM
 - DETACHED CONDOMINIUM
 - FUTURE PRIVATE DRIVE
 - MIXED CONDOMINIUM
 - MIXED COMMERCIAL USE
 - OPEN SPACE
 - PUBLIC FACILITY
 - PARK
 - RECREATION
 - SCHOOL
 - FUTURE PUBLIC DRIVE
 - FIRE STATION
 - TRAIL HEAD
 - PROJECT BOUNDARY

LANDMARK VILLAGE VTTM No. 53108
Land Use
Exhibit
PSOMAS
DATE: 11/26/03 REVISED ON: 08/02/07
JOB No: 1NRC0107.08 T.220 SHEET 1 OF 1

APPENDIX A – Mission Village Affordable Housing Map



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DATE: 12/22/2005
JOB#: 0015-23-10
HNR 011-01.APR

REVISED ON: 08/06/07
SHEET 1 OF 1

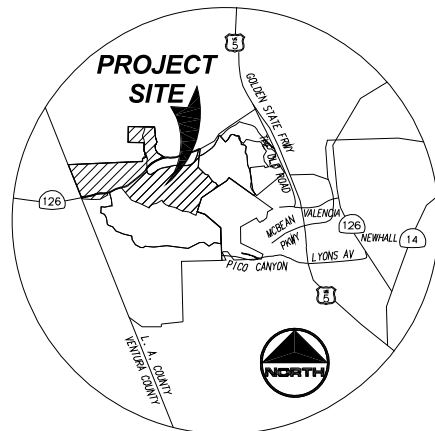
NEWHALL LAND

MISSION VILLAGE
VTTM 61105

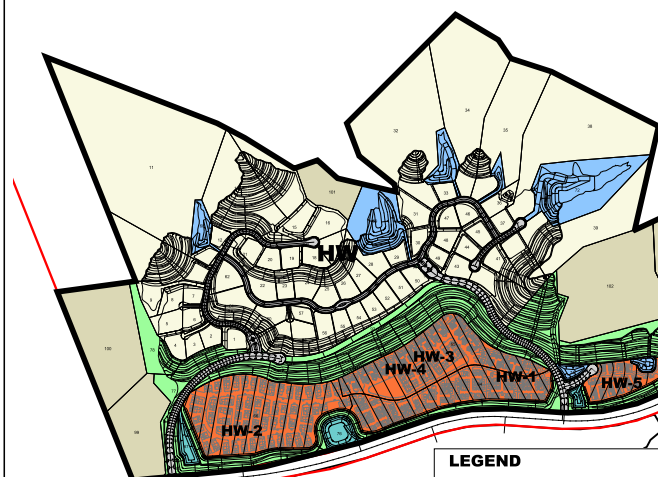
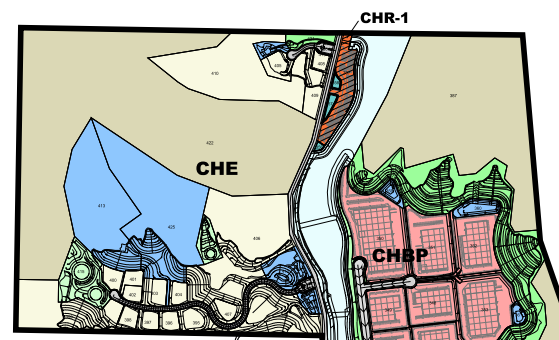
GIS LAND BASE-LAND USE

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APPENDIX A – Homestead Affordable Housing Map



VICINITY MAP



WRP

LOS ANGELES COUNTY
VENTURA COUNTY

LEGEND

	PROJECT BOUNDARY
	NEWHALL RANCH BOUNDARY
Land Use	
	S.F.-DETACHED (AVG. 1.0 AC; 2.5 AC)
	S.F.-DETACHED (AVG. 1.0 AC)
	S.F.-DETACHED (AVG. 2.5 AC)
	SFD-10000
	SFD-7500
	SFD-6500
	SFD-6000
	SFD-5800
	SFD-5500
	SFD-5000
	SFD-CONDO
	M.F.-CONDO
	COMM-BUSINESS PARK
	P.F.-DEBRIS BASIN
	P.F.-WATER QUALITY
	Drainage
	O.S. TRAIL LDZ
	O.S.-LDZ
	PUBLIC FACILITY
	OPEN SPACE
	O.S.-NAT.
	RECREATION
	PARK
	SCHOOL
	Public Road
	Road-Pvt Dr
	Road-Pvt & Fut St

VALENCIA

HOMESTEAD
VTTM 060678

LAND MARK VILLAGE
VTTM 53108

MISSION VILLAGE
VTTM 061105

LEGACY VILLAGE
VTTM 061996

VALENCIA
COMMERCE CENTER
VTPM 18108

TRAVEL
VILLAGE

NEWHALL LAND

HOMESTEAD
VTTM 060678

GIS LAND BASE-LAND USE



N.T.S.

DATE: 01/31/06
JOB#: 0015-23-10
REVISED ON: 08/06/07
L001
SHEET 1 OF 1

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3.10 AFFORDABLE HOUSING PROGRAM

1. Program Description

The Newhall Ranch Affordable Housing Program provides for the direct inclusion of very low, low and moderate income affordable housing opportunities as herein defined within the Specific Plan Area. The Newhall Ranch Affordable Housing Program is consistent with Policy 5.2 of the Housing Element of the Los Angeles County General Plan that states:

"Support and facilitate the development of housing affordable to lower-income households, and encourage the dispersal of new lower-income housing throughout the unincorporated areas of the County"

The Newhall Ranch Affordable Housing Program provides very low, low and moderate income affordable housing opportunities in several housing categories including for-sale units and rental units. While affordable units may be located within any planning area which allows for residential development, it is anticipated that most units will be located within the land use designations Medium Residential (M), High Residential (H) and Mixed-Use (MU). These categories allow for higher intensity residential uses associated with housing types that can provide sales and rental rates that lower income households can afford. This allows Affordable Housing opportunities to be dispersed throughout the community and within convenient proximity to employment and retail centers.

2. General Requirements

a. Affordable Housing Unit Requirement

Affordable Housing Units shall be designated and made available at rental rates or sales prices as required in Section 3.10, paragraph 3, Implementation of Affordable Housing Program. A total of 2,200 Affordable Housing Units

DEVELOPMENT REGULATIONS
3.10 AFFORDABLE HOUSING PROGRAM

shall be provided, of which 440 units shall be Very Low Income Affordable Housing Units (of the 440 units a minimum of 44 units will be reserved for seniors 62 years of age or older), 330 units shall be Low Income Households at 65 percent of the Los Angeles County median income, 220 units shall be Low Income Affordable Housing Units at 80 percent of the Los Angeles County median income, and 1210 units shall be Moderate Income Affordable Housing Units as all are herein defined. These units shall be provided in a variety of residential units (for-sale and for-rent) and will be disbursed throughout the Specific Plan area. The Affordable Housing Units provided will approximate the floor area and number of bedrooms of market rate units. Affordable Housing Units shall be constructed in pace with the overall residential development of the Specific Plan pursuant to Section 3.10, paragraph 3, Implementation of Affordable Housing Program.

b. Definitions

(1) Affordable Housing Unit

For purposes of this Specific Plan, residential units which comply with the criteria set forth in Section 3.10, paragraph 3a, Criteria For Affordable Housing Unit Credit, are defined as Affordable Housing Units and shall be credited to the Newhall Ranch Affordable Housing Unit Requirement.

(2) Very Low Income Affordable Household

For the purposes of this Specific Plan, a Very Low Income Affordable Household shall be defined as any household (one-person, two-person, etc.) whose total income is equal to or less than 50 percent of the corresponding household size Los Angeles County median household income, as determined by the United States Department of Housing and Urban Development pursuant to Section 8 of the United States Housing Act of 1937 at the time of sale or initial rental of a residential unit.

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(3) Low Income Affordable Household

For the purposes of this Specific Plan, a Low Income Affordable Household shall be defined as any household (one-person, two-person, etc.) whose total income is either a) greater than 50 percent but not more than 65 percent of the corresponding household size Los Angeles County median household income, as determined by the United States Department of Housing and Urban Development pursuant to Section 8 of the United States Housing Act of 1937 at the time of sale or initial rental of a residential unit, hereinafter referred to as a Low Income (65%) Affordable Household; or b) greater than 65 percent but not more than 80 percent of the corresponding household size Los Angeles County median household income, as determined by the United States Department of Housing and Urban Development pursuant to Section 8 of the United States Housing Act of 1937 at the time of sale or initial rental of a residential unit, hereinafter referred to as a Low Income (80%) Affordable Household.

(4) Moderate Income Affordable Household

For the purposes of this Specific Plan, a Moderate Income Affordable Household shall be defined as any household (one-person, two-person, etc.) whose total household income is equal to or less than 120 percent of the corresponding household size Los Angeles County median household income, as determined by the United States Department of Housing and Urban Development pursuant to Section 8 of the United States Housing Act of 1937 at the time of sale or initial rental of a residential unit.

(5) Affordable Household Income

For the purposes of this Specific Plan, Affordable Household Income shall be defined as the total household income of the Affordable Household.

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c. Affordable Housing Categories

The following Affordable Housing categories shall be allowed under the Newhall Ranch Affordable Housing Program:

- (1) Rental units;
- (2) For-sale units; and
- (3) Any units supported by state, local or private affordable housing programs. Nothing set forth in Section 3.10 shall preclude the use of any affordable housing assistance from any sources, private, public or non-profit, for achieving the Affordable Housing Unit Requirement, provided additional Affordable Housing Units in excess of those set forth in Section 3.10, paragraph 2a are also provided in conjunction with the affordable housing assistance.

d. Affordable Housing Locations

Affordable Housing Units as defined above may be located within any area designated Low-Medium Residential (LM), Medium Residential (M), High Residential (H) or Mixed-Use (MU) on the Newhall Ranch Land Use Plan, Exhibit 2.3-1.

3. Implementation of Affordable Housing Program

a. Criteria for Affordable Housing Unit Credit

- (1) Affordable Household Priority to Qualified Very Low, Low and Moderate Income Households and Credit:

To qualify and receive credit as an Affordable Housing Unit, designated residential units must first be reserved for sale or rent to Very Low, Low Income (65%), Low Income (80%), and Moderate Income Affordable Households for a period of ninety (90) days commencing from the date each designated Affordable Housing Unit is released for sale or rent.

(a) For-Sale Very Low Income Affordable Housing Unit

A for-sale unit shall qualify and be credited as a Very Low Income Affordable Housing Unit if purchased by a qualified Very Low Income Affordable Household and if the monthly mortgage payment is equal to or less than an amount calculated by multiplying one-twelfth times 33 percent times 50 percent of the Los Angeles County median annual household income of a household of four.

For purposes of this Specific Plan, for-sale monthly mortgage payments shall be calculated using a conventional 30-year fixed-rate mortgage interest rate and terms as published by Fannie Mae or Freddie Mac for the time of sale and shall include principal and interest.

(b) For-Sale Low Income Affordable Housing Unit

A for-sale unit shall qualify and be credited as a Low Income Affordable Housing Unit if purchased by a qualified Low Income (65%) or Low Income (80%) Affordable Household and if the monthly mortgage payment is equal to or less than an amount calculated by multiplying one-twelfth times 33 percent times 65 or

DEVELOPMENT REGULATIONS
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80 percent, as applicable, of the Los Angeles County median annual household income of a household of four.

(c) For-Sale Moderate Income Affordable Housing Unit

A for-sale unit shall qualify and be credited as a Moderate Income Affordable Housing Unit if purchased by a qualified Moderate Income Affordable Household and if the monthly mortgage payment is equal to or less than an amount calculated by multiplying one-twelfth times 33 percent times 120 percent of the Los Angeles County median annual household income of a household of four.

(d) For-Rent Very Low Income Affordable Housing Unit

A rental unit shall qualify and be credited as a Very Low Income Affordable Housing Unit if the monthly rental payment including utilities for the first fifteen (15) years of operation does not exceed the product of one-twelfth times 30 percent times 50 percent of the Los Angeles County median annual household income, adjusted for family size appropriate for the unit, in each month of operation.

For purposes of this Specific Plan, "adjusted for family size appropriate to the unit" shall mean a household of one person in the case of a studio unit, two persons in the case of a one-bedroom unit, three persons in the case of a two-bedroom unit, four persons in the case of a three-bedroom unit, and five persons in the case of a four-bedroom unit.

(e) For-Rent Low Income Affordable Housing Unit

A rental unit shall qualify and be credited as a Low Income (65%) or Low Income (80%) Affordable Housing Unit if the monthly rental payment including utilities for the first 15 years of operation does not exceed the product of one-twelfth times 30 percent times 65 or 80 percent, as applicable, of the Los Angeles County median

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annual household income, adjusted for family size appropriate for the unit, in each month of operation.

(f) **For-Rent Moderate Income Affordable Housing Unit**

A rental unit shall qualify and be credited as a Moderate Income Affordable Housing Unit if the monthly rental payment including utilities for the first 15 years of operation does not exceed the product of one-twelfth times 30 percent times 120 percent of the Los Angeles County median annual household income, adjusted for family size appropriate for the unit, in each year of operation.

(2) **Affordable Housing Unit Credit**

- (a) Any for-sale or for-rent Affordable Housing Unit occupied by an Affordable Household shall qualify for credit for the Affordable Housing Program, or:
- (b) If after first being reserved and offered for sale to qualified Very Low, Low Income (65%), Low Income (80%), Moderate Income Households for a period of ninety (90) days after release for sale a valid purchase contract has not been executed by such a Household, or the purchase contract is canceled by the buyer after the ninety days has expired, the unit may be sold to the general public at market value and will qualify for credit as a Very Low, Low Income (65%), Low Income (80%), or Moderate Income Housing Unit; or
- (c) If after first being offered for rent a valid lease contract has not been executed by a Very Low, Low Income (65%), Low Income (80%), or Moderate Affordable Household, or the lease contract is canceled by the renter after the 90 days has expired, the unit may be rented to the general public at market rental rates and will receive credit as an Affordable Housing Unit, provided the next available vacant unit of similar square footage and number of bedrooms is reserved and offered for rent to a qualified Very Low,

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Low Income (65%), Low Income (80%), or Moderate Income Affordable Household for a period of 60 days. If after being offered for rent a valid lease contract has not been executed by an Affordable Household, or the lease contract is canceled by the renter after the 60 days has expired, the similar unit may be rented to the general public at market rental rates and the requirement to continue to make the next available similar size vacant unit available to Affordable Households for 60 days shall remain in effect until a unit is occupied by an Affordable Household. Whenever an Affordable Household vacates a qualified Affordable Rental Housing Unit during the first 15 years of operation the above requirements shall apply. No Affordable Housing Rental unit shall receive credit until initially occupied by a Very Low (50%) Income, Low Income (65%), or Low Income (80%) household.

A deed restriction with a term of 15 years shall be recorded upon initial occupancy of each qualified Affordable Rental Housing Unit containing the above provisions. Upon initial occupancy, the builder of any deed restricted rental unit shall contract with the Los Angeles County Community Development Commission (CDC) to monitor and enforce the rental provisions set forth above, assist the owner of any deed restricted unit in finding qualified Low Income (65%), Low Income (80%), or Moderate Income Affordable Households to rent the unit, or make CDC rental assistance programs available to prospective renters.

In order to provide maximum opportunity to Affordable Households seeking rental units, the designation of an Affordable Rental Housing Unit may be transferred from one residential rental unit to another at any time during the 15 year period, provided the monthly rent of the unit transferred to is equal to or less than the monthly rent of the Affordable Rental Housing Unit, and no more than 50 percent of units within the rental development being transferred to are designated Affordable Housing Units. Such transfers shall be identified in the Annual Affordable Housing Report described in Section 3.10, paragraph 3c.

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b. Affordable Housing Monitoring Program

A monitoring program and Affordable Housing Phasing Increments shall be established as set forth below to provide Very Low, Low Income (65%), Low Income (80%), and Moderate Income Affordable Housing Units along with the construction of total residential development within the Specific Plan area. The monitoring program shall be initiated when the Newhall Ranch Tentative Tract Map that includes the 5,000th Planned residential unit is submitted to Los Angeles County. Said map application shall be accompanied by the first Affordable Housing Report that shall contain the information described in Section 3.10, paragraph 3c below. The requirements of the individual Phasing Increments are set forth below.

(1) First Affordable Housing Phasing Increment

The County may withhold or restrict building permits for Planned residential units in excess of the 11,000th Planned residential unit (except building permits for Affordable Housing Units), until such time as it can be demonstrated that 1,100 Affordable Housing Units have been made available for sale or rent.

(2) Second Affordable Housing Phasing Increment

The County may withhold or restrict building permits for Planned residential units in excess of the 16,500th Planned residential unit (except building permits for Affordable Housing Units), until such time as it can be demonstrated that 1,650 Affordable Housing Units have been made available for sale or rent.

(3) Third Affordable Housing Phasing Increment

The County may withhold or restrict building permits for any Planned residential units in excess of the 20,000th Planned residential unit (except building permits for Affordable Housing Units), until such time as it can be

demonstrated that 2,200 Affordable Housing Units have been made available for sale or rent.

(4) Affordable Household Unit Mix

- (a) All Very Low Income Affordable Housing Units may be rental units.
- (b) All Low Income (65%) Affordable Housing Units may be rental units.
- (c) A minimum of fifty percent (50%) of Low Income (80%) Affordable Housing units shall be rental units.
- (d) Moderate Income Affordable Housing Units may be either rental units or for-sale units.
- (e) The proportion of Very Low, Low Income (65%), Low Income (80%), and Moderate Income Affordable Housing Units in each Affordable Housing Phasing Increment shall be provided in substantially the same proportion as their respective ratio to the total Affordable Housing Unit Requirement set forth in Section 3.10, paragraph 2a.

c. Annual Affordable Housing Report

Initiation of the Annual Affordable Housing Report shall start as described in Section 3.10, paragraph 3b above. Following the first Affordable Housing Report, Annual Affordable Housing Reports shall be submitted to Los Angeles County Department of Regional Planning and CDC on an annual basis no later than March 1 covering the Affordable Housing Program through December 31 of the previous year until such time as it is demonstrated that the Affordable Housing Unit Requirement set forth in Section 3.10, paragraph 2a has been achieved. The Annual Affordable Housing Report shall include the total number of residential units constructed within the Specific Plan area; the total number and percentage of Very Low, Low Income (65%), Low Income (80%), and Moderate Income Affordable Housing Units qualifying for credit under the Affordable Housing Program by housing category; the rents or sales prices and addresses of units qualifying for credit during the previous year; rents and addresses of rental units qualifying for credit during the immediate past 15 years; and the mortgage and payment calculations pursuant to Section 3.10, paragraph 3a above. The developer of any Affordable Housing Unit shall make a good-faith effort at marketing the units to qualified households and an affordable household marketing program (advertising promotion and other efforts to locate income-qualified households) shall be provided to CDC for their review and approval with the first annual Affordable Housing Report.

**Letter from California Regional Water Quality Control Board,
September 11, 2007**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**REGION 4, LOS ANGELES REGION**

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(213) 576-6600 • Fax (213) 576-6640
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ORDER NO. <R4-2007-0046>**NPDES NO. <CA0064556>**

**WASTE DISCHARGE REQUIREMENTS FOR THE
NEWHALL RANCH SANITATION DISTRICT (Newhall Ranch Water Reclamation Plant)
DISCHARGE TO THE SANTA CLARA RIVER**

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	Newhall Ranch Sanitation District
Name of Facility	Newhall Ranch Water Reclamation Plant
Facility Address	Hwy 126 at Los Angeles/Ventura County Line
	Newhall, California, 91355
	Los Angeles County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by the Newhall Ranch Sanitation District from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Location

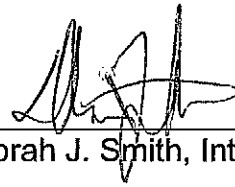
Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
001	Tertiary treated effluent	34 °, 0.403166', " N	118°, 0.6896667', " W	Santa Clara River

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	September 6, 2007
This Order shall become effective on:	October 27, 2007
This Order shall expire on:	August 10, 2012
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date

IT IS HEREBY ORDERED, that in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Deborah J. Smith, Interim Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on September 6, 2007.

A handwritten signature in black ink, appearing to read 'D. Smith', is positioned above a horizontal line.

Deborah J. Smith, Interim Executive Officer

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Attachment I - Biosolids/sludge Use and Disposal Requirements.....I-1

I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 4. Facility Information

DISCHARGER	Newhall Ranch Sanitation District
NAME OF FACILITY	Newhall Ranch Water Reclamation Plant
FACILITY ADDRESS	Hwy 126 at Los Angeles/Ventura County Line
	Newhall, California, 91355
	Los Angeles County
FACILITY CONTACT, TITLE, AND PHONE	Steve Sheridan, Principal Engineer (626) 458-7151
MAILING ADDRESS	900 South Fremont, Alhambra, CA 91803
TYPE OF FACILITY	POTW
FACILITY DESIGN FLOW	2 million gallons per day (MGD) in Phase I

II. FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Water Board), finds:

A. Background. Newhall Land and Farming Company (Newhall Land) submitted a Report of Waste Discharge (ROWD), dated April 23, 2004, and applied for a National Pollutant Discharge Elimination System (NPDES) permit authorization to discharge up to 2 MGD of tertiary treated wastewater from a new privately owned treatment works that would treat the sewage generated by the inhabitants of Landmark Village, a new housing development. Newhall Land indicated to Regional Water Board staff that they were interested in applying for the NPDES permit as a publicly owned treatment works, not a privately owned treatment works. However, Newhall Land was in the process of applying to the Local Agency Formation Commission for Los Angeles County (LAFCO), for approval of the formation of a new sanitation district. On July 27, 2006, the Newhall Ranch Sanitation District (Newhall Ranch SD) was formed. In September 2007, the grant deed will be transferred from Newhall Land to Newhall Ranch SD. In January 2008 grading activities are scheduled to begin. In June 2008 Newhall Ranch SD is scheduled to approve the plans for the plant design. In September 2008, construction of the Newhall Ranch Water Reclamation Plant (Newhall Ranch WRP) is scheduled to begin. By August 2009, the Newhall Ranch WRP should be constructed. The Newhall Ranch WRP would have an initial design capacity of 2 MGD, and incrementally increase its design capacity to 6.8 MGD [2.0 MGD in Phase I; 4.0 MGD in Phase II; and 6.8 MGD in Phase III], to accommodate the sewage generated by new inhabitants, as additional tracts of the Landmark Village development project are completed. Newhall Land submitted a revised ROWD on September 27, 2004. Their consultants have been submitting additional information, including receiving water sampling analytical results to supplement the ROWD. On March 30, 2007, additional receiving water data was received at the Regional Water Board, submitted by Geosyntec on behalf of Newhall Land. The application has not been deemed complete because Newhall Ranch SD has not submitted the required signatures on the ROWD. Upon receipt of the revised ROWD with the signatory requirements for the Newhall SD, the ROWD may be considered as complete as possible, except for the effluent data which will need to be collected after start-up. On May 4 and May 23, 2007, the Regional Water Board received the required signatory statement.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. Facility Description. Newhall Land is planning on transferring ownership of the land to Newhall Ranch SD in September 2007. Newhall Ranch SD will make a formal application to the existing twenty-four County Sanitation Districts to become signatory to the amended Joint Administration Agreement, dated July 1, 1980, of the County Sanitation Districts of Los Angeles County. Newhall Ranch SD will also make a formal

application to the Santa Clarita Valley Sanitation District to enter into an agreement regarding the ownership and operation of the Newhall Ranch WRP. These agreements will allow the Los Angeles County Sanitation District to be the operator of the Newhall Ranch WRP, and to provide engineering and administrative staff at the Newhall Ranch WRP. However, Newhall Ranch SD will retain ownership of the Newhall Ranch WRP.

Treatment at the Newhall Ranch WRP, a publicly owned treatment works (POTW), will consist of screening, activated sludge secondary treatment with membrane bioreactors, nitrification/denitrification, ultraviolet disinfection, and partial reverse osmosis (RO). There will be no solids handling facilities in the near term. Waste activated sludge, or biosolids, will be hauled away to the Valencia Water Reclamation Plant for further treatment and disposal; and will be regulated under the Valencia WRP's NPDES permit No. CA0054216. Brine from the RO system will be disposed of through deep well injection, under a separate USEPA permit. Treated wastewater will be discharged from Discharge Point 001 (see Table on Cover Page) to the Santa Clara River, a water of the United States, tributary to the Santa Clara River Estuary, within the Santa Clara River Watershed. Attachment B provides a map of the area around the facility. Attachment C provides the flow schematic of the facility.

- C. Legal Authorities.** This Order is issued pursuant to section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC.
- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available environmental information. Attachment F, which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E, and others are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** The discharger is not a new source, as defined in the CWA. (See 40 CFR part 122.2.) Therefore, the approval of this permit is not subject to the California Environmental Quality Act (CEQA), as stated in section 13389 of the CWC.
- F. Technology-based Effluent Limitations.** The Code of Federal Regulations (CFR) at 40 CFR Section 122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on tertiary treatment or equivalent requirements that meet both the technology-based secondary treatment standards, at 40 CFR Part 133, for POTWs and protect the beneficial uses of the receiving waters. The Regional Water Board has considered the factors listed in CWC Section 13241 in establishing these requirements and Best Professional Judgment (BPJ) in accordance with 40 CFR Section 125.3. A detailed Limitations and Discharge Requirements (Adopted Version September 6, 2007)

discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations. Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

H. Water Quality Control Plans. The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (hereinafter Basin Plan) on June 13, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic water supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to the Santa Clara River are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Santa Clara River (Hydro Unit 403.51)	<p><u>Existing:</u> Industrial Service Supply (IND), Industrial Process Supply (PROC), Agricultural Supply (AGR), Ground Water Recharge (GWR), Freshwater Replenishment (FRSH), Water Contact Recreation (REC1), Non-contact Water Recreation (REC2), Warm freshwater habitat (WARM); Wildlife habitat (WILD), preservation or rare, threatened or endangered species (RARE), and Wetland Habitat (WET).</p> <p><u>Potential*:</u> Municipal and domestic water supply (MUN).</p>
	Santa Clara River (Hydro Unit 403.41)	<p><u>Existing:</u> IND, PROC, AGR, GWR, FRSH, REC1, REC2, WARM, WILD, RARE, Migration of Aquatic Organisms (MIGR) and WET.</p> <p><u>Potential*:</u> MUN.</p>

	Santa Clara River (Hydro Unit 403.31)	<u>Existing:</u> IND, PROC, AGR, GWR, FRSH, REC1, REC2, WARM; WILD, RARE, MIGR and WET. <u>Potential*:</u> MUN.
	Santa Clara River (Hydro Unit 403.21)	<u>Existing:</u> IND, PROC, AGR, GWR, FRSH, REC1, -REC2, WARM; WILD, RARE, MIGR and WET. <u>Potential*:</u> MUN.
	Santa Clara River (Hydro Unit 403.11)	<u>Existing:</u> IND, PROC, AGR, GWR, FRSH, REC1, REC2, WARM; Coldwater Habitat (COLD), WILD, RARE, MIGR and WET. <u>Potential*:</u> MUN.
	Santa Clara River Estuary (Hydro Unit 403.11)	<u>Existing:</u> Navigation (NAV); , REC1, REC2, Commercial and Sport Fishing (COMM); Estuarine Habitat (EST); Marine Habitat (MAR); WILD, RARE, MIGR; Spawning Reproduction, and/or Early Development (SPWN); and, WET.

* The potential municipal and domestic supply (p* MUN) beneficial use for the waterbody is consistent with the State Water Resources Control Board Order No. 88-63 and Regional Water Board Resolution No. 89-003; however, the Regional Water Board has only conditionally designated the MUN beneficial use of the surface water and at this time cannot establish effluent limitations designed to protect the conditional designation.

Requirements of this Order implement the Basin Plan.

On July 25, 2003, USEPA approved the State's most recent list of impaired waterbodies. The list (hereinafter referred to as the 303(d) list) was prepared in accordance with Section 303(d) of the Federal Clean Water Act to identify specific impaired waterbodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources.

Santa Clara River, Santa Clara River Estuary, and their tributaries were on the 2002 303(d) List. The following pollutants/stressors, from point and non-point sources, were identified as impacting the receiving waters:

1. Santa Clara River Estuary: Chem A, High Coliform Count, Toxaphene;
2. Santa Clara River Reach 3 (Freeman Diversion to A Street): Ammonia, Chloride, Total Dissolved Solids;
3. Santa Clara River Reach 7 (Blue Cut to West Pier Hwy 99 Bridge): Chloride, High Coliform Count, Nitrate and Nitrite;
4. Santa Clara River Reach 8 (W. Pier Hwy 99 to Bouquet Canyon Rd. Bridge) -- Hydrologic Unit 403.51: Chloride and High Coliform Count; and,

5. Santa Clara River Reach 9 (Bouquet Canyon Rd to above Lang Gaging) -- Hydrologic Unit 403.51: High Coliform Count.

On October 25, 2006, the State Water Board adopted a revised 303(d) list. The 2006 303(d) list was partially approved by the USEPA on November 30, 2006. However, on March 8, 2007, USEPA partially disapproved the State's 303(d) list, by disapproving the State's omission of impaired waters that met federal listing regulations or guidance. USEPA is adding 64 waters and 37 associated pollutants to the State's 303(d) list.

Santa Clara River, Santa Clara River Estuary, and their tributaries are on the 2006 303(d) List. The following pollutants/stressors, from point and non-point sources, were identified as impacting the receiving waters:

1. Santa Clara River Estuary: Chem A, Coliform Bacteria, and Toxaphene;
2. Santa Clara River Reach 1 (Estuary to Hwy 101 Bridge): Toxicity;
3. Santa Clara River Reach 3 (Freeman Diversion to A Street): Total Dissolved Solids;
4. Santa Clara River Reach 5 [formerly Reach 7 in 2002 303d list] (Blue Cut to West Pier Hwy 99 Bridge): Coliform Bacteria;
5. Santa Clara River Reach 6 [formerly Reach 8 in 2002 303d list] (W. Pier Hwy 99 to Bouquet Canyon Rd. Bridge) -- Hydrologic Unit 403.51: Chlorpyrifos, Coliform Bacteria, Diazinon, and Toxicity; and,
6. Santa Clara River Reach 7 [formerly Reach 9 in 2002 303d list] (Bouquet Canyon Rd to above Lang Gaging) -- Hydrologic Unit 403.51: Coliform Bacteria.

I. National Toxics Rule (NTR) and California Toxics Rule (CTR). USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

J. State Implementation Policy. On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes

implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

- K. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 17, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does not include compliance schedules or interim effluent limitations.
- L. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 C.F.R. § 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.
- M. Stringency of Requirements for Individual Pollutants.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (BOD), total suspended solids (TSS), and hydrogen ion concentration (pH). Restrictions on BOD, TSS, and pH are specified in federal regulations as discussed in Finding F, and the permit's technology-based pollutant restrictions are no more stringent than required by the CWA. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA"

pursuant to 40 CFR 131.21(c)(1). For the most part, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

This Order contains pollutant restrictions that are more stringent than applicable federal requirements and standards. Specifically, this Order includes effluent limitations for bis(2-ethylhexyl)phthalate that are more stringent than applicable federal standards, but that are nonetheless necessary to meet numeric objectives or protect beneficial uses. The rationale for including these limitations is explained in this Fact Sheet. In addition, the Regional Water Board has considered the factors in Water Code section 13241 in Facts Sheet Section IV.D.3.

- N. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- O. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR Section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Since this is a new discharge, all effluent limitations and requirements contained in this Order are new. Therefore, there is no relaxation of effluent limitations. The WDR is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- P. Endangered Species Act.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
- Q. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

- R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- S. Provisions and Requirements Implementing State Law.** The provisions/requirements in subsection IV.C of this Order is included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- T. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- U. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

III. DISCHARGE PROHIBITIONS

- A. Wastes discharged from Discharge Serial No. 001 shall be limited to tertiary-treated wastewater, as proposed in the ROWD.
- B. Discharges not specifically authorized under this Order are prohibited.
- C. The bypass or overflow of untreated wastewater or wastes to surface waters or surface water drainage courses is prohibited, except as allowed in Standard Provision I.G. of Attachment D, Federal Standard Provisions.
- D. The effluent temperature shall not exceed 86°F, except as a result of external ambient temperature.
- E. Radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Section 64443, CCR, or subsequent revisions.
- F. In accordance with 40 CFR, Parts 133.102(a)(3) and 133.102(b)(3), for BOD and total suspended solids, respectively, the 30-day average percent removal shall not be less than 85 percent. Percent removal is defined as a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.
- G. The wastes discharged to water courses shall at all times be adequately disinfected. For the purpose of this requirement, the wastes shall be considered adequately disinfected if the median number of coliform organisms at some point in the treatment process does not exceed 2.2 per 100 milliliters, and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last seven (7) days for which analysis has been completed. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and the disinfection processes.
- H. For the protection of the water contact recreation beneficial use, the wastes discharged to water courses shall have received adequate treatment, so that the turbidity of the treated wastewater does not exceed: (a) 0.2 Nephelometric turbidity units (NTUs) more than 5 percent of the time (72 minutes) during any 24 hour period; and (b) 0.5 NTUs at any time.
- I. To protect underlying ground water basins, pollutants shall not be present in the wastes discharged at concentrations that pose a threat to ground water quality.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point 001

1. Final Effluent Limitations – Discharge Point 001

- a. The Discharge of tertiary-treated effluent shall maintain compliance with the following effluent limitations at Discharge Point 001, with compliance measured at Monitoring Location EFF-001, RSW-001U, RSW-001D and RSW-002D as described in the attached Monitoring and Reporting Program (Attachment E):

Table 6. Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand 5-day @ 20°C	mg/L	20	30	45	--	--
	lbs/day ¹	330	500	750	--	--
Total Suspended Solids	mg/L	15	40	45	--	--
	lbs/day	250	670	750	--	--
pH	standard units	--	--	--	6.5	8.5
Settleable solids	mL/L	0.1	--	0.3	--	--
Oil and grease	mg/L	10	--	15	--	--
	lbs/day ¹	170	--	250	--	--
Total dissolved solids	mg/L	1000	--	--	--	--
	lbs/day ¹	16,700	--	--	--	--
Chloride	mg/L	100 ²	--	--	--	--
	lbs/day ¹	1,700	--	--	--	--
Sulfate	mg/L	400	--	--	--	--
	lbs/day ¹	6,700	--	--	--	--

¹ The mass emission rates are based on the plant design flow rate of 2.0 mgd, and are calculated as follows: Flow(MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. However, the design capacity will incrementally increase to 6.8 MGD, as the phased plant upgrades approach completion. The mass-based effluent limitation will accordingly be modified following an Anti-degradation analysis demonstration conducted by the Discharger, and upon certification and approval of increased treatment plant capacity. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

² This is the water quality objective for chloride in the current Basin Plan. This effluent limitation is consistent with the assumptions of the Chloride TMDL for the Santa Clara River, Resolution No. 2002-018, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Include a TMDL for Chloride in the Santa Clara River (Chloride TMDL)*. This effluent limitation applies immediately. However, if a chloride site specific objective (Chloride SSO) is adopted for the reach of the Santa Clara River in which Newhall Ranch WRP will discharge, then the permit may be reopened to make the necessary changes to this permit, following USEPA approval of the Chloride SSO.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Boron	mg/L	1.5	--	--	--	--
	lbs/day ¹	25	--	--	--	--
Total ammonia (NH ₃ as N)	mg/L	1.93 ³	--	3.87 ⁴	--	--
	lbs/day ¹	25	--	65	--	--
Nitrate-N + Nitrite-N	mg/L	5	--	--	--	--
	lbs/day ¹	80	--	--	--	--
Nitrite-N	mg/L	0.9	--	--	--	--
	lbs/day ¹	15	--	--	--	--
Detergents (as MBAS)	mg/L	0.5	--	--	--	--
	lbs/day ¹	8	--	--	--	--
Total residual chlorine	mg/L	--	--	0.1	--	--
Antimony	µg/L	6	--	--	--	--
	lbs/day ¹	0.1	--	--	--	--
Arsenic	µg/L	10	--	--	--	--
	lbs/day ¹	0.2	--	--	--	--
Copper	µg/L	22	--	44	--	--
	lbs/day ¹	0.37	--	0.73	--	--
Lead	µg/L	13	--	26	--	--
	lbs/day ¹	0.22	--	0.43	--	--
Mercury	µg/L	0.051	--	0.10	--	--
	lbs/day ¹	0.00085	--	0.0017	--	--
Nickel	µg/L	100	--	--	--	--
	lbs/day ¹	1.7	--	--	--	--
Selenium	µg/L	4.1	--	8.2	--	--
	lbs/day	0.068	--	0.14	--	--
Zinc	µg/L	5000	--	--	--	--
	lbs/day ¹	83	--	--	--	--
Cyanide	µg/L	4.2	--	8.5	--	--
	lbs/day ¹	0.07	--	0.14	--	--
Acrylonitrile	µg/L	0.66	--	1.3	--	--
	lbs/day ¹	0.011	--	0.022	--	--
Tetrachloroethylene	µg/L	5	--	--	--	--
	lbs/day ¹	0.08	--	--	--	--

³ This is the monthly average effluent limit calculated according to the Implementation Plan for ammonia in the Basin Plan, which specifies how to translate the Ammonia WQO into a final effluent limit, consistent with the assumptions of the Santa Clara River Nitrogen Compounds TMDL, Resolution No. 03-011.

⁴ This is the daily maximum effluent limit calculated according to the Implementation Plan for ammonia in the Basin Plan, which specifies how to translate the Ammonia WQO into a final effluent limit, consistent with the assumptions of the Santa Clara River Nitrogen Compounds TMDL, Resolution No. 03-011.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Bis(2-ethylhexyl)phthalate	µg/L	4	--	--	--	--
	lbs/day ¹	0.07	--	--	--	--
p-Dichlorobenzene (1,4-Dichlorobenzene)	µg/L	5	--	--	--	--
	lbs/day ¹	0.08	--	--	--	--
Lindane	µg/L	0.2	--	--	--	--
	lbs/day	0.003	--	--	--	--
4,4-DDE	µg/L	0.00059	--	0.0012	--	--
	lbs/day	0.000009 8	--	0.00002	--	--
Iron	µg/L	300	--	--	--	--
	lbs/day	5	--	--	--	--

b. **Percent Removal:** The average monthly percent removal of BOD 5-day 20°C and total suspended solids shall not be less than 85 percent.

c. **Acute Toxicity Limitation and Effluent Requirements:**

1. The acute toxicity of the effluent shall be such that:
 - (i) the average survival in the undiluted effluent for any three (3) consecutive 96-hour static renewal bioassay tests shall be at least 90%, and
 - (ii) no single test producing less than 70% survival
2. If either of the above requirements IV.A.1.c.1.i. or IV.A.1.c.1.ii. is not met, the Discharger shall conduct six additional tests over a twelve-week period. The Discharger shall ensure that they receive results of a failing acute toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 5 business days of the receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume testing at the regular frequency as specified in the monitoring and reporting program. However, if the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the limits.
3. If the initial test and any of the additional six acute toxicity bioassay tests result in less than 70 % survival, the Discharger shall immediately implement the Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan described later in this section.

4. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program (MRP) No. YYYY.

d. Chronic Toxicity Requirements

1. The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:

$$TU_c = \frac{100}{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

2. There shall be no chronic toxicity in the effluent discharge
3. If the chronic toxicity of the effluent exceeds the monthly median of 1.0 TU_c, the Discharger shall immediately implement accelerated chronic toxicity testing according to MRP CI No. 9322, Section V.B.3. If any three out of the initial test and the six accelerated test results exceed 1.0 TU_c, the Discharger shall initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in the MRP section of this Order (Sections V.D and V.E).
4. The Discharger shall conduct chronic toxicity monitoring as specified in MRP CI No. 9322.
5. This permit may be reopened to include effluent limitations for pollutants found to be causing chronic toxicity and to include numeric chronic toxicity effluent limitations based on direction from the State Water Resources Control Board or failure of the District to comply fully with the TRE/TIE requirements.

2. Interim Effluent Limitations

- a. Interim Effluent Limitations are not applicable for new dischargers.

Table 7. Interim Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum

B. Land Discharge Specifications

[Not Applicable. Holding ponds at the Newhall Ranch WRP will be concrete-lined and are not designed for purposeful groundwater recharge.]

Table 8. Land Discharge Specifications

Parameter	Units	Discharge Specifications		
		Average Monthly	Maximum Daily	Average Annual

C. Reclamation Specifications

[Not Applicable. Water recycling requirements will be regulated under a separate order. Newhall intends on recycling all of its treated effluent during dry weather.]

Table 9. Reclamation Discharge Specifications

Parameter	Units	Discharge Specifications		
		Average Monthly	Maximum Daily	Average Annual

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the Santa Clara River:

1. For waters designated with a warm freshwater habitat (WARM) beneficial use, the temperature of the receiving water at any time or place and within any given 24-hour period shall not be altered by more than 5°F above the natural temperature (or above 70°F if the ambient receiving water temperature is less than 60°F) due to the discharge of effluent at the receiving water station located downstream of the discharge. Natural conditions shall be determined on a case-by-case basis.
2. The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of wastes discharged. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of wastes discharged. Natural conditions shall be determined on a case-by-case basis.
3. The dissolved oxygen in the receiving water shall not be depressed below 5 mg/L as a result of the wastes discharged.
4. The fecal coliform concentration in the receiving water shall not exceed the following, as a result of wastes discharged:
 - a. Geometric Mean Limits
 - i. E.coli density shall not exceed 126/100 mL.
 - ii. Fecal coliform density shall not exceed 200/100 mL.
 - b. Single Sample Limits
 - i. E.coli density shall not exceed 235/100 mL.
 - ii. Fecal coliform density shall not exceed 400/100 mL.
5. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in natural turbidity attributable to controllable water quality factors shall not exceed the following limits, as a result of wastes discharged:
 - a. Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%, and

- b. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.
6. The wastes discharged shall not produce concentrations of toxic substances in the receiving water that are toxic to or cause detrimental physiological responses in human, animal, or aquatic life.
7. The wastes discharged shall not cause concentrations of contaminants to occur at levels that are harmful to human health in waters which are existing or potential sources of drinking water.
8. The concentrations of toxic pollutants in the water column, sediments, or biota shall not adversely affect beneficial uses as a result of the wastes discharged.
9. The wastes discharged shall not contain substances that result in increases in BOD, which adversely affect the beneficial uses of the receiving waters.
10. Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
11. The wastes discharged shall not cause the receiving waters to contain any substance in concentrations that adversely affect any designated beneficial use.
12. The wastes discharged shall not alter the natural taste, odor, and color of fish, shellfish, or other surface water resources used for human consumption.
13. The wastes discharged shall not result in problems due to breeding of mosquitoes, gnats, black flies, midges, or other pests.
14. The wastes discharged shall not result in visible floating particulates, foams, and oil and grease in the receiving waters.
15. The wastes discharged shall not alter the color of the receiving waters; create a visual contrast with the natural appearance of the water; nor cause aesthetically undesirable discoloration of the receiving waters.
16. The wastes discharged shall not contain any individual pesticide or combination of pesticides in concentrations that adversely affect beneficial uses of the receiving waters. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life as a result of the wastes discharged.

B. Groundwater Limitations

1. In ground waters used for domestic or municipal supply the concentration of coliform organisms over any seven day period shall be less than 1.1/ 100 ml.
2. Ground waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents and radionuclides in excess of the limits specified in the provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into the Basin Plan.
3. Ground waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen ($\text{NO}_3\text{-N} + \text{NO}_2\text{-N}$), 45 mg/L as nitrate (NO_3), 10 mg/L as nitrate-nitrogen ($\text{NO}_3\text{-N}$), or 1 mg/L as nitrite-nitrogen ($\text{NO}_2\text{-N}$).
4. Groundwaters shall not contain taste or odor producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

VI. PROVISIONS

A. Standard Provisions

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. The Discharger shall comply with the following provisions:
 - a. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by Section 13050 of the California Water Code.
 - b. Odors, vectors, and other nuisances of sewage or sludge origin beyond the limits of the treatment plant site or the sewage collection system due to improper operation of facilities, as determined by the Regional Water Board, are prohibited.
 - c. All facilities used for collection, transport, treatment, or disposal of "wastes" shall be adequately protected against damage resulting from overflow, washout, or inundation from a storm or flood having a recurrence interval of once in 100 years.
 - d. Collection, treatment, and disposal systems shall be operated in a manner that precludes public contact with wastewater.
 - e. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer of the Regional Water Board.
 - f. The provisions of this order are severable. If any provision of this order is found invalid, the remainder of this Order shall not be affected.
 - g. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the CWA.
 - h. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities or penalties to which the discharger is or may be subject to under Section 311 of the CWA.
 - i. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of

storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Water Board to local agencies.

- j. Discharge of wastes to any point other than specifically described in this Order is prohibited, and constitutes a violation thereof.
- k. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, 403, and 405 of the Federal CWA and amendments thereto.
- l. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.
- m. Oil or oily material, chemicals, refuse, or other contaminating materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any such spill of such materials shall be contained and removed immediately.
- n. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.
- o. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.
- p. The Discharger shall file with the Regional Water Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.
- q. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify the Regional Water Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Regional Water Board.
- r. The CWC provides that any person who violates a waste discharge requirement or a provision of the CWC is subject to civil penalties of up to \$5,000 per day, \$10,000 per day, or \$25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to \$10 per gallon per

day or \$25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations. Violation of any of the provisions of the NPDES program or of any of the provisions of this Order may subject the violator to any of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

- s. Under CWC 13387, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this order, including monitoring reports or reports of compliance or noncompliance, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained in this order and is subject to a fine of not more than \$25,000 or imprisonment of not more than two years, or both. For a second conviction, such a person shall be punished by a fine of not more than \$25,000 per day of violation, or by imprisonment of not more than four years, or by both.
- t. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.
- u. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:
 - (1) Name and general composition of the chemical,
 - (2) Frequency of use,
 - (3) Quantities to be used,
 - (4) Proposed discharge concentrations, and
 - (5) USEPA registration number, if applicable.
- v. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, maximum daily effluent limitation, or receiving water limitation of this Order, the Discharger shall notify the Watershed Regulatory Section Chief at the Regional Water Board by telephone (213) 576-6616, or electronically, within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.

C. Special Provisions

1. Reopener Provisions

- a. This Order may be modified, revoked and reissued, or terminated for cause, including, but not limited to:

- (1) Violation of any term or condition contained in this Order;
- (2) Obtaining this Order by misrepresentation, or by failure to disclose fully all relevant facts;
- (3) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliances does not stay any condition of this Order.

- b. This Order may be reopened and modified, in accordance with SIP section 2.2.2.A to incorporate the results of revised reasonable potential analyses to be conducted upon receipt of additional data.
- c. This Order may be modified, in accordance with the provisions set forth in 40 CFR, Parts 122 and 124 to include requirements for the implementation of the watershed protection management approach.
- d. The Board may modify, or revoke and reissue this Order if present or future investigations demonstrate that the discharge(s) governed by this Order will cause, have the potential to cause, or will contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters.
- e. This Order may also be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR, Parts 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order, endangerment to human health or the environment resulting from the permitted activity, or acquisition of newly obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the

District for an Order modification, revocation and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

- f. This Order may be modified, in accordance with the provisions set forth in 40 CFR, Parts 122 to 124, to include new MLs.
- g. If applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Regional Water Board may institute proceedings under these regulations to modify or revoke and reissue the Order to conform to the toxic effluent standard or prohibition.
- h. The waste discharged shall not cause a violation of any applicable water quality standard for receiving waters. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA, or amendments, thereto, the Regional Water Board will revise and modify this Order in accordance with such standards.
- i. This Order may be reopened and modified, to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of a water quality objective, the adoption of a site specific objective, or the adoption of a TMDL for the Santa Clara River Watershed.
- j. This Order may be reopened and modified to revise the chronic toxicity effluent limitation or the residual chlorine effluent limitation, to the extent necessary, to be consistent with State Water Board precedential decisions, new policies, new laws, or new regulations.
- k. This Order may be reopened to modify final effluent limits, if at the conclusion of necessary studies conducted by the Discharger, the Regional Water Board determines that dilution credits, attenuation factors, or metal translators are warranted.
- l. This Order may be reopened to increase the design capacity, following certification of the EIR for subsequent housing developments, those which will come after the Landmark Village project.
- m. This Order may be reopened to re-calculate the ammonia-nitrogen water quality based final effluent limitations, if the effluent pH and temperature differ significantly from the receiving water pH and temperature monitoring data.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Treatment Plant Capacity

The Discharger shall submit a written report to the Executive Officer of the Regional Water Board within 90 days after the "30-day (monthly) average" daily dry-weather flow equals or exceeds 75 percent of the design capacity of waste treatment and/or disposal facilities. The Discharger's senior administrative officer shall sign a letter, which transmits that report and certifies that the discharger's policy-making body is adequately informed of the report's contents. The report shall include the following:

- (1) The average daily flow for the month, the date on which the peak flow occurred, the rate of that peak flow, and the total flow for the day;
- (2) The best estimate of when the monthly average daily dry-weather flow rate will equal or exceed the design capacity of the facilities; and
- (3) A schedule for studies, design, and other steps needed to provide additional capacity for waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

This requirement is applicable to those facilities which have not reached 75 percent of capacity as of the effective date of this Order. For those facilities that have reached 75 percent of capacity by that date but for which no such report has been previously submitted, such report shall be filed within 90 days of the issuance of this Order.

b. Toxicity Reduction Requirements.

The Discharger shall prepare and submit a copy of the Discharger's initial investigation Toxicity Reduction Evaluation (TRE) workplan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the workplan within 60 days from the date in which it was received, the workplan shall become effective. The Discharger shall use USEPA manual EPA/833B-99/002 (municipal) as guidance, or most current version. At a minimum, the initial investigation TRE workplan must contain the provisions in **Attachment G**. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

- (1) A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

- (2) A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the facility; and,
- (3) If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

If the effluent toxicity test result exceeds the 1.0 TUc toxicity trigger, then the Discharger shall immediately implement accelerated toxicity testing that consists of six additional tests, approximately every two weeks, over a 12-week period. Effluent sampling for the first test of the six additional tests shall commence within 5 business days of receipt of the test results exceeding the toxicity trigger.

If the results of any two of the six tests (any two tests in a 12-week period) exceed the limitation, the Discharger shall initiate a Toxicity Reduction Evaluation (TRE).

If results of the implementation of the facility's initial investigation TRE workplan (as described above) indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 15 days of completion of the initial investigation TRE.

Detailed toxicity testing and reporting requirements are contained in Section V of the MRP (Attachment E).

3. Best Management Practices and Pollution Prevention

a. Storm Water Pollution Prevention Plan (SWPPP)

Within 90 days from the Newhall Ranch WRP's start-up date, the Discharger shall submit an updated SWPPP that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged directly to waters of the State to the Regional Water Board. The SWPPP shall be developed in accordance with the requirements in *Storm Water Pollution Prevention Plan Requirements (Attachment H)*. If all storm water is captured and treated on-site and no storm water is discharged or allowed to run off-site from the Facility, the Discharge shall provide certification with descriptions of on-site storm water management to the Regional Water Board.

b. Spill Contingency Plan (SCP)

The Discharger shall maintain a SCP for the Newhall WRP and its sanitary sewage collection system in an up-to-date condition and shall amend the SCP

whenever there is a change (e.g. in the design, construction, operation, or maintenance of the sewage system or sewage facilities) which materially affects the potential for spills. The Discharger shall review and amend the SCP as appropriate after each spill from the Newhall WRP or in the service area of the Facility. Upon request of the Regional Water Board, the Discharge shall submit the SCP and any amendments to the Regional Water Board. The Discharger shall ensure that the up-to-date SPC is readily available to the sewage system personnel at all times and that the sewage system personnel are familiar with it.

c. Pollutant Minimization Program (PMP)

Reporting protocols in the Monitoring and Reporting Program, Attachment E, Section VIII.B.4 describe sample results that are to be reported as Detected but Not Quantified (DNQ) or Not Detected (ND). Definitions for a reported Minimum Level (ML) and Method Detection Limit (MDL) are provided in Attachment A. These reporting protocols and definitions are used in determining the need to conduct a Pollution Minimization Program (PMP) as follows:

The Discharger shall be required to develop a PMP as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a pollutant is present in the effluent above an effluent limitation and either:

- (1) The concentration of the pollutant is reported as DNQ and the effluent limitation is less than the reported ML; or
- (2) The concentration of the pollutant is reported as ND and the effluent limitation is less than the MDL.

The goal of the PMP shall be to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost-effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to CWC Section 13263.3(d), shall be considered to fulfill the PMP requirements.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

- (1) An annual review and semi-annual monitoring of potential sources of the reportable pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;
- (2) Quarterly monitoring for the reportable pollutant(s) in the influent to the wastewater treatment system;
- (3) Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant(s) in the effluent at or below the effluent limitation;
- (4) Implementation of appropriate cost-effective control measures for the reportable pollutant(s), consistent with the control strategy; and
- (5) An annual status report that shall be sent to the Regional Water Board including:
 - (a) All PMP monitoring results for the previous year;
 - (b) A list of potential sources of the reportable pollutant(s);
 - (c) A summary of all actions undertaken pursuant to the control strategy; and
 - (d) A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications

- a. Wastewater treatment facilities subject to this Order shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Chapter 3, Subchapter 14, Title 23 of the California Code of Regulations (Section 13625 of the California Water Code).
- b. The Discharger shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the discharger shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power.

5. Special Provisions for Municipal Facilities (POTWs Only)

a. Biosolids Requirements

- (1) The Discharger shall comply with the requirements of 40 CFR 503, in general, and in particular the requirements in **Attachment I** of this Order, [Biosolids/sludge Management]. These requirements are enforceable by USEPA.
- (2) The Discharger shall ensure compliance with the requirements in SWRCB Order No. 2004- 10-DWQ, General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural and Land Reclamation Activities" for those sites receiving the Discharger's biosolids which a Regional Water Quality Control Board has placed under this general order, and with the requirements in individual Waste Discharge Requirements (WDRs) issued by a Regional Water Board for sites receiving the Discharger's biosolids.
- (3) The Discharger shall comply, if applicable, with WDRs issued by other Regional Water Boards to which jurisdiction the biosolids are transported and applied, and with the State of Arizona's biosolids rule for biosolids transported to Arizona for treatment and/or use.
- (4) The Discharger shall furnish this Regional Water Board with a copy of any report submitted to USEPA, State Water Board or other Regional Water Board, with respect to municipal sludge or biosolids.

b. Pretreatment Requirements

- (1) This Order does not include any requirements for a Pretreatment Program because the discharge is less than 2.0 MGD and because the POTW does not have any significant industrial users (SIUs). In the future, once the design flow approaches 5.0 MGD, the Discharger will be required to develop a Pretreatment Program; and implement and enforce the pretreatment program in its entire service area.
- (2) Once an approved Pretreatment Program has been developed, the Discharger shall evaluate whether its pretreatment local limits are adequate to meet the requirements of this Order. If the Newhall Ranch WRP becomes interconnected with the Los Angeles County Sanitation Districts of Los Angeles County's Saugus and Valencia WRPs joint outfall sewer system, then the Discharger will consider, in the development of local limits, the effluent limitations contained in these Orders, and other relevant factors due to the interconnectedness of the system and protection of the upstream plants. One year prior to increasing the design capacity to 5 MDG or prior to having a significant industrial user (SIU) discharge into the treatment plant's collection system, the Discharger shall submit to the Regional Water Board their proposed Pretreatment Program and the results of the evaluation indicating whether local limits are needed. Any revised local limits shall be

submitted to the Regional Water Board for approval under 40 CFR 403.18. In addition, the Discharger shall consider collection system overflow protection from such constituents as oil and grease, etc. Lack of adequate local limits shall not be a defense against liability for violations of effluent limitations and overflow prevention requirements contained in this Order.

- (3) Any substantial modifications to the approved Pretreatment Program, as defined in 40 CFR 403.18(b), shall be submitted in writing to the Regional Water Board and shall not become effective until Regional Water Board approval is obtained.
- (4) The Discharger shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the CWA with timely, appropriate, and effective enforcement actions. The Discharger shall require all nondomestic users subject to the federal categorical standards to comply with those standards and shall take enforcement actions against those users who do not comply with the standards. Such enforcement actions shall be consistent with an enforcement response plan, developed pursuant to 40 CFR 403.8(f)(5). The Discharger shall ensure that all nondomestic users subject to the federal categorical standards achieve compliance no later than the date specified in those requirements or, in the case of a new nondomestic user, upon commencement of the discharge.
- (5) The Discharger shall perform the pretreatment functions as required in Federal Regulations 40 CFR 403 including, but not limited to:
 - (a) Implement the necessary legal authorities as provided in 40 CFR 403.8(f)(1);
 - (b) Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;
 - (b) Implement the programmatic functions as provided in 40 CFR 403.8(f)(2); and
 - (d) Provide the requisite funding and personnel to implement the Pretreatment Program as provided in 40 CFR 403.8(f)(3).
- (6) The Discharger shall submit semiannual and annual reports to the Regional Water Board, describing the Discharger's pretreatment activities over the period. The annual and semiannual reports shall contain, but not be limited to, the information required in the attached *Pretreatment Reporting Requirements (Attachment J)*, or an approved revised version thereof. A full scan of the priority pollutants for the influent and effluent should be conducted at least annually in August. If the Discharger is not in compliance with any conditions or requirements of this Order, the Discharger shall include the

reasons for noncompliance and shall state how and when the Discharger will comply with such conditions and requirements.

- (7) The Discharger shall be responsible and liable for the performance of all control authority pretreatment requirements contained in 40 CFR 403, including subsequent regulatory revisions thereof. Where Part 403 or subsequent revision places mandatory actions upon the Discharger as Control Authority but does not specify a timetable for completion of the actions, the Discharger shall complete the required actions within six months from the effective date of this Order or the effective date of Part 403 revisions, whichever comes later. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the Regional Water Board, USEPA, or other appropriate parties, as provided in the CWA. The Regional Water Board or USEPA may initiate enforcement action against a nondomestic user for noncompliance with applicable standards and requirements, as provided in the CWA and/or the California Water Code.

c. Spill Reporting Requirements

(1) Notification

For certain spills, overflows and bypasses, the Discharger shall make notifications as required below:

- a. For any spills or overflows of any volume, discharged where they are, or will probably be discharged, to waters of the State, the Discharger shall immediately notify the local health agency in accordance with the California Health and Safety Code section 5411.5. This notification shall occur no later than two hours after the knowledge of the incident.
- b. For any spills or overflows of 1000 gallons or more discharged where they are, or probably be discharged to waters of the State, the Discharger shall immediately notify the State Office of Emergency Services pursuant to Water Code section 13271. This notification shall occur no later than two hours after the knowledge of the incident.
- c. For spills, overflows or bypasses of any volume that flowed to receiving waters or entered a shallow ground water aquifer or has public exposure, the Discharger shall notify such spills to the Regional Water Board, by telephone or electronically as soon as possible but not later than two hours of knowledge of the incident. The following information shall be included in the initial notification: location; date and time of spill; volume and nature of the spill; cause(s) of the spill; mitigation measures implemented, if known at the time.

(2) Monitoring

For certain spills, overflows and bypasses, the Discharger shall monitor as required below:

- a. To define the geographical extent of spill's impact the Discharger shall obtain grab samples for spills, overflows or bypasses of any volume that reach receiving waters. The Discharger shall analyze the samples for total and fecal coliforms or E. coli, and enterococcus, and relevant pollutants of concern, upstream and downstream of the point of entry of the spill (if feasible, accessible and safe). This monitoring shall be done on a daily basis from time the spill is known until the results of two consecutive sets of bacteriological monitoring indicate the return to the background level or the County Department of Health Services authorizes cessation of monitoring.
- b. The Discharger shall obtain a grab sample (if feasible, accessible, and safe) for spills, overflows or bypasses of any volume that flowed to receiving waters, entered a shallow ground water aquifer, or have the potential for public exposure; and for all spills, overflows or bypasses of 1,000 gallons or more. The Discharger shall analyze the sample for total and fecal coliforms or E. coli, and enterococcus, and relevant pollutants of concern depending on the area and nature of spills or overflows if feasible, accessible and safe.

(3) Reporting

The Regional Water Board initial notification shall be followed by:

- a. A written preliminary report five working days after disclosure of the incident (submission to the Regional Water Board of the log number of the Sanitary Sewer Overflow Database entry shall satisfy this requirement). Within 30 days after submitting the preliminary report, the Discharger shall submit the final written report to this Regional Water Board. (A copy of the final written report, for a given incident, already submitted pursuant to a Statewide General Waste Discharge Requirements for Wastewater Collection System Agencies, may be submitted to the Regional Water Board to satisfy this requirement.) The written report shall document the information required in paragraph 4. below, monitoring results and any other information required in provisions of the Standard Provisions document including corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences. The Executive Officer for just cause can grant an extension for submittal of the final written report.

- b. The Discharger shall include a certification in the annual summary report (due according to the schedule in the Monitoring and Reporting Program) that states—the sewer system emergency equipment, including alarm systems, backup pumps, standby power generators, and other critical emergency pump station components were maintained and tested in accordance with the Discharger's Preventative Maintenance Plan. Any deviations from or modifications to the Plan shall be discussed.

(4) Records

The Discharger shall develop and maintain a record of all spills, overflows or bypasses of raw or partially treated sewage from its collection system or treatment plant. This record shall be made available to the Regional Water Board upon request and a spill summary shall be included in the annual summary report. The records shall contain:

- a. the date and time of each spill, overflow or bypass;
- b. the location of each spill, overflow or bypass;
- c. the estimated volume of each spill, overflow or bypass including gross volume, amount recovered and amount not recovered, monitoring results;
- d. the cause of each spill, overflow or bypass;
- e. whether each spill, overflow or bypass entered a receiving water and, if so, the name of the water body and whether it entered via storm drains or other man-made conveyances;
- f. mitigation measures implemented; and,
- g. corrective measures implemented or proposed to be implemented to prevent/minimize future occurrences.

(5) Activities Coordination

In addition, Regional Water Board expects that the POTW's owners/operators will coordinate their compliance activities for consistency and efficiency with other entities that have responsibilities to implement: (i) this NPDES permit, including the Pretreatment Program, (ii) a MS4 NPDES permit that may contain spill prevention, sewer maintenance, reporting requirements and (iii) the SSO WDR.

(6) Consistency with Sanitary Sewer Overflows WDRs

The Clean Water Act prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under a NPDES permit. (33 U.S.C. §§1311, 1342). The State Water Board adopted General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems, (WQ Order No. 2006-0003) on May 2, 2006, to provide a consistent, statewide regulatory approach to address Sanitary Sewer Overflows (SSOs). The SSOs WDR requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all SSOs to the State Water Board's online SSO database.

The requirements contained in this Order in Sections VI.C.3.b. (Spill Contingency Plan Section), VI.C.4. (Construction, Operation and Maintenance Specifications Section), and VI.C.6. (Spill Reporting Requirements) are intended to be consistent with the requirements of the SSO WDR. The Regional Water Board recognizes that there may be some overlap between the NPDES permit provisions and SSO WDR requirements.

The requirements of the SSO WDR are considered the minimum thresholds (see Finding 11 of WQ Order No. 2006-0003). The Regional Water Board will accept the documentation prepared by the Permittees under the SSO WDR for compliance purposes, as satisfying the requirements in Sections VI.C.3.b., VI.C.4., and VI.C.6. provided any more specific or stringent provisions enumerated in this Order, have also been addressed

- (7) The Discharger shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other cause, discharge of raw or inadequately treated sewage does not occur.

7. Compliance Schedules

- a. Since this is a new discharge, Newhall Ranch WRP is not eligible for interim effluent limitations or compliance schedules. Final effluent limitations shall apply at all times. However, there may be an exception during the start-up operations of a new biological system. Compliance will be measured at Monitoring Location EFF 001, RSW-001U, and RSW-002D as described in the attached Monitoring and Reporting Program.
- b. As effluent data becomes available, and it is demonstrated that the Discharger will have difficulty meeting an effluent limitation, Newhall Ranch SD may request that the Board revisit the idea of issuing a compliance schedule with interim limits under a separate enforcement order, such as a Time Schedule Order (TSO) or a Cease and Desist Order (CDO).

VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below:

A. General.

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Appendix A of this Order. Dischargers shall be deemed out of compliance with effluent limitations if the concentration of the monitoring sample is greater than the effluent limitation and greater than or equal to the reported minimum level (ML).

B. Multiple Sample Data Reduction.

When determining compliance with a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses and the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Monthly Effluent Limitation (AMEL).

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger may be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger may be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

If the analytical result of a single sample, monitored monthly, quarterly, semiannually, or annually, does not exceed the AMEL for a given parameter, the Discharger will have demonstrated compliance with the AMEL for each day of that month for that parameter.

If the analytical result of any single sample, monitored monthly, quarterly, semiannually, or annually, exceeds the AMEL for any parameter, the Discharger shall collect up to four additional samples within the same calendar month. All analytical results shall be reported in the monitoring report for that month. The concentration of pollutant (an arithmetic mean or a median) in these samples estimated from the "Multiple Sample Data Reduction" Section above, will be used for compliance determination.

In the event of noncompliance with an AMEL, the sampling frequency for that parameter shall be increased to weekly and shall continue at this level until compliance with the AMEL has been demonstrated.

D. Average Weekly Effluent Limitation (AWEL).

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

A calendar week will begin on Sunday and end on Saturday. Partial weeks consisting of four or more days at the end of any month will include the remaining days of the week, which occur in the following month in order to calculate a consecutive seven-day average. This value will be reported as a weekly average or seven-day average on the SMR for the month containing the partial week of four or more days. Partial calendar weeks consisting of less than four days at the end of any month will be carried forward to the succeeding month and reported as a weekly average or a seven-day average for the calendar week that ends with the first Saturday of that month.

E. Maximum Daily Effluent Limitation (MDEL).

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

F. Instantaneous Minimum Effluent Limitation.

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and the discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

G. Instantaneous Maximum Effluent Limitation.

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and the discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

H. Six-month Median Effluent Limitation.

If the median of daily discharges over any 180-day period exceeds the six-month median effluent limitation for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for each day of that 180-day period for that parameter. The next assessment of compliance will occur after the next sample is taken. If only a single sample is taken during a given 180-day period and the analytical result for that sample exceeds the six-month median, the discharger will be considered out of compliance for the 180-day period. For any 180-period during which no sample is taken, no compliance determination can be made for the six-month median limitation.

I. Percent Removal.

The average monthly percent removal is the removal efficiency expressed in percentage across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of pollutant concentrations (C in mg/L) of influent and effluent samples collected at about the same time using the following equation:

$$\text{Percent Removal (\%)} = [1 - (C_{\text{Effluent}} / C_{\text{Influent}})] \times 100 \%$$

When preferred, the Discharger may substitute mass loadings and mass emissions for the concentrations.

J. Mass and Concentration Limitations

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be ND or DNQ, the corresponding mass emission rate determined from that sample concentration shall also be reported as ND or DNQ.

K. Compliance with single constituent effluent limitations

Dischargers are out of compliance with the effluent limitation if the concentration of the pollutant (see Section B "Multiple Sample Data Reduction" above) in the monitoring sample is greater than the effluent limitation and greater than or equal to the RML.

L. Compliance with effluent limitations expressed as a sum of several constituents

Dischargers are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

M. Mass Emission Rate.

The mass emission rate shall be obtained from the following calculation for any calendar day:

$$\text{Mass emission rate (lb/day)} = \frac{8.34}{N} \sum_{i=1}^N Q_i C_i$$

$$\text{Mass emission rate (kg/day)} = \frac{3.79}{N} \sum_{i=1}^N Q_i C_i$$

in which 'N' is the number of samples analyzed in any calendar day. 'Q_i' and 'C_i' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' grab samples, which may be taken in any calendar day. If a composite sample is taken, 'C_i' is the concentration measured in the composite sample and 'Q_i' is the average flow rate occurring during the period over which samples are composited.

The daily concentration of all constituents shall be determined from the flow-weighted average of the same constituents in the combined waste streams as follows:

$$\text{Daily concentration} = \frac{1}{Q_t} \sum_{i=1}^N Q_i C_i$$

in which 'N' is the number of component waste streams. 'Q_i' and 'C_i' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Q_t' is the total flow rate of the combined waste streams.

N. Bacterial Standards and Analysis.

1. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

$$\text{Geometric Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n}$$

where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL or CFU/100 mL) found on each day of sampling.

2. For bacterial analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for enterococcus). The detection methods used for each analysis shall be reported with the results of the analyses.
3. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR 136 (revised March 12, 2007), unless alternate methods have been approved by USEPA pursuant to 40 CFR 136, or improved methods have been determined by the Executive Officer and/or USEPA.
4. Detection methods used for enterococcus shall be those presented in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure* or any improved method determined by the Executive Officer and/or USEPA to be appropriate.

O. Single Operational Upset

A single operational upset (SOU) that leads to simultaneous violations of more than one pollutant parameter shall be treated as a single violation and limits the Discharger's liability in accordance with the following conditions:

1. A single operational upset is broadly defined as a single unusual event that temporarily disrupts the usually satisfactory operation of a system in such a way that it results in violation of multiple pollutant parameters.
2. A Discharger may assert SOU to limit liability only for those violations which the Discharger submitted notice of the upset as required in Provision V.E.2(b) of Attachment D – Standard Provisions.
3. For purpose outside of CWC Section 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with USEPA Memorandum "Issuance of Guidance Interpreting Single Operational Upset" (September 27, 1989).
4. For purpose of CWC Section 13385 (h) and (i), determination of compliance and civil liability (including any more specific definition of SOU, the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations) shall be in accordance with CWC Section 13385 (f)(2).

ATTACHMENT A – DEFINITIONS

Acutely Toxic Conditions, as used in the context of mixing zones, refers to lethality that occurs to mobile aquatic organisms that move or drift through the mixing zone.

Arithmetic Mean (μ), also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL): the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL): the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) are methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges including storm water. BMPs include structural and non-structural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

Bioaccumulative pollutants are those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Biologically-Based Receiving Water Flow refers to the method for determining receiving water flows developed by the U.S. EPA Office of Research and Development which directly uses the averaging periods and exceedance frequencies specified in the acute and chronic aquatic life criteria for individual pollutants (e.g., 1 day and 3 years for acute criteria, and 4 days and 3 years for the chronic criteria). Biologically-based flows can be calculated using the program DFLOW.

Carcinogenic pollutants are substances that are known to cause cancer in living organisms.

Coefficient of Variation (CV) is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Completely-Mixed Discharge condition means not more than a 5 percent difference, accounting for analytical variability, in the concentration of a pollutant exists across a transect of the water body at a point within two stream/river widths from the discharge point.

Daily Discharge: Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ) are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Dilution Ratio is the critical low flow of the upstream receiving water divided by the flow of the effluent discharged.

Discharger-Specific WER is a WER that is applied to individual pollutant limits in an NPDES permit issued to a particular permit holder. A discharger-specific WER applies only to the applicable limits in the discharger's permit. Discharger-specific WERs are distinguished for WERs that are developed on a waterbody or watershed basis as part of a water quality standards action resulting in adoption of an SSO.

Dynamic Models used for calculating effluent limitations predict the effects of receiving water and effluent flow and of concentration variability. The outputs of dynamic models can be used to base effluent limitations on probability estimates of receiving water concentrations rather than critical conditions (which are used in the steady-state model). The three dynamic

modeling techniques recommended by the U.S. EPA for calculating effluent limitations are continuous simulation, Monte Carlo simulation, and lognormal probability modeling.

Effluent Concentration Allowance (ECA) is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Existing Discharger means any discharger that is not a new discharger. An existing discharger includes an "increasing discharger" (i.e., an existing facility with treatment systems in place for its current discharge that is or will be expanding, upgrading, or modifying its existing permitted discharge after the effective date of this Policy).

Four-Day Average of Daily Maximum Flows is the average of daily maximums taken from the data set in four-day intervals.

Harmonic Mean flows are expressed as $Q_{hm} = (n)/(\sum_{i=1}^n 1/x_i)$, where x_i = specific data values and n = number of data values.

Incompletely-Mixed Discharge is a discharge that contributes to a condition that does not meet the meaning of a completely-mixed discharge condition.

Infeasible means not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

Inland Surface Waters are all surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation: the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation: the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Load Allocation (LA) is the portion of a receiving water's total maximum daily load that is allocated to one of its nonpoint sources of pollution or to natural background sources.

Long-Term Arithmetic Mean Flow is at least two years of flow data used in calculating an arithmetic mean as defined in this appendix.

Maximum Daily Flow is the maximum flow sample of all samples collected in a calendar day.

Maximum Daily Effluent Limitation (MDEL) means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML) is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Mutagenic pollutants are substances that are known to cause a mutation (i.e., change in a gene or chromosome) in living organisms.

Mutual Water Company is defined in the Public Utilities Code, section 2725 as: "any private corporation or association organized for the purpose of delivering water to its stockholders and members at cost, including use of works for conserving, treating and reclaiming water".

New Discharger includes any building, structure, facility, or installation from which there is, or may be, a discharge of pollutants, the construction of which commenced after the effective date of this Policy.

Not Detected (ND) are those sample results less than the laboratory's MDL.

Objectionable Bottom Deposits are an accumulation of materials or substances on or near the bottom of a water body, which creates conditions that adversely impact aquatic life, human health, beneficial uses, or aesthetics. These conditions include, but are not limited to, the accumulation of pollutants in the sediments and other conditions that result in harm to benthic organisms, production of food chain organisms, or fish egg development. The presence of such deposits shall be determined by RWQCB(s) on a case-by-case basis.

Ocean Waters are the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP) means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

Process Optimization means minor changes to the existing facility and treatment plant operations that optimize the effectiveness of the existing treatment processes.

Public Entity includes the federal government or a state, county, city and county, city, district, public authority, or public agency.

Reporting Level (RL) is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Satellite Collection System is the portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Source of Drinking Water is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

Standard Deviation (σ) is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

Teratogenic pollutants are substances that are known to cause structural abnormalities or birth defects in living organisms.

Toxicity Reduction Evaluation (TRE) is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity.

The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

Use Attainability Analysis is a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological and economic factors as described in 40 CFR 131.10(g) (40 CFR 131.3, revised as of July 1, 1997).

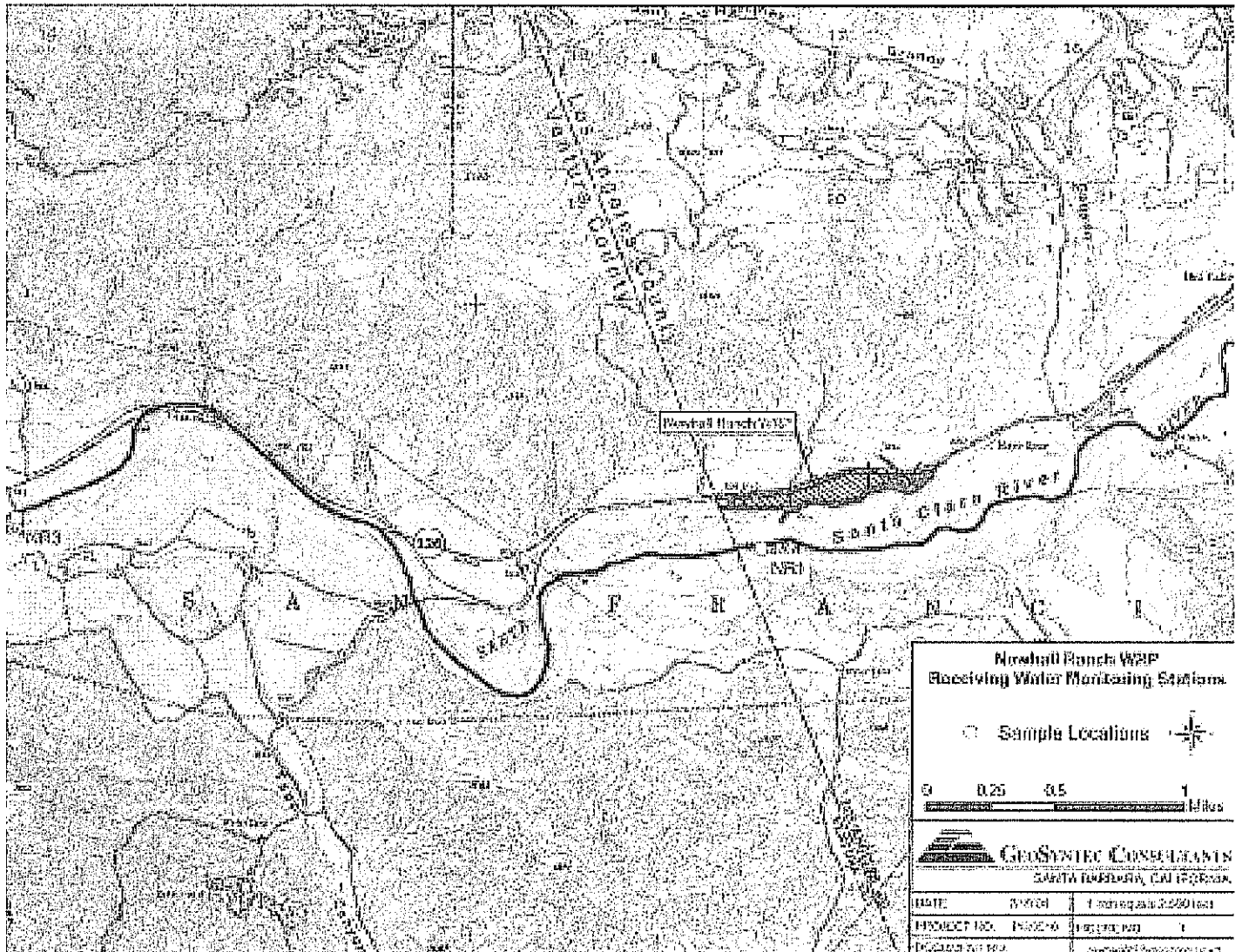
Water Effect Ratio (WER) is an appropriate measure of the toxicity of a material obtained in a site water divided by the same measure of the toxicity of the same material obtained simultaneously in a laboratory dilution water.

1Q10 is the lowest flow that occurs for one day with a statistical frequency of once every 10 years.

7Q10 is the average low flow that occurs for seven consecutive days with a statistical frequency of once every 10 years.

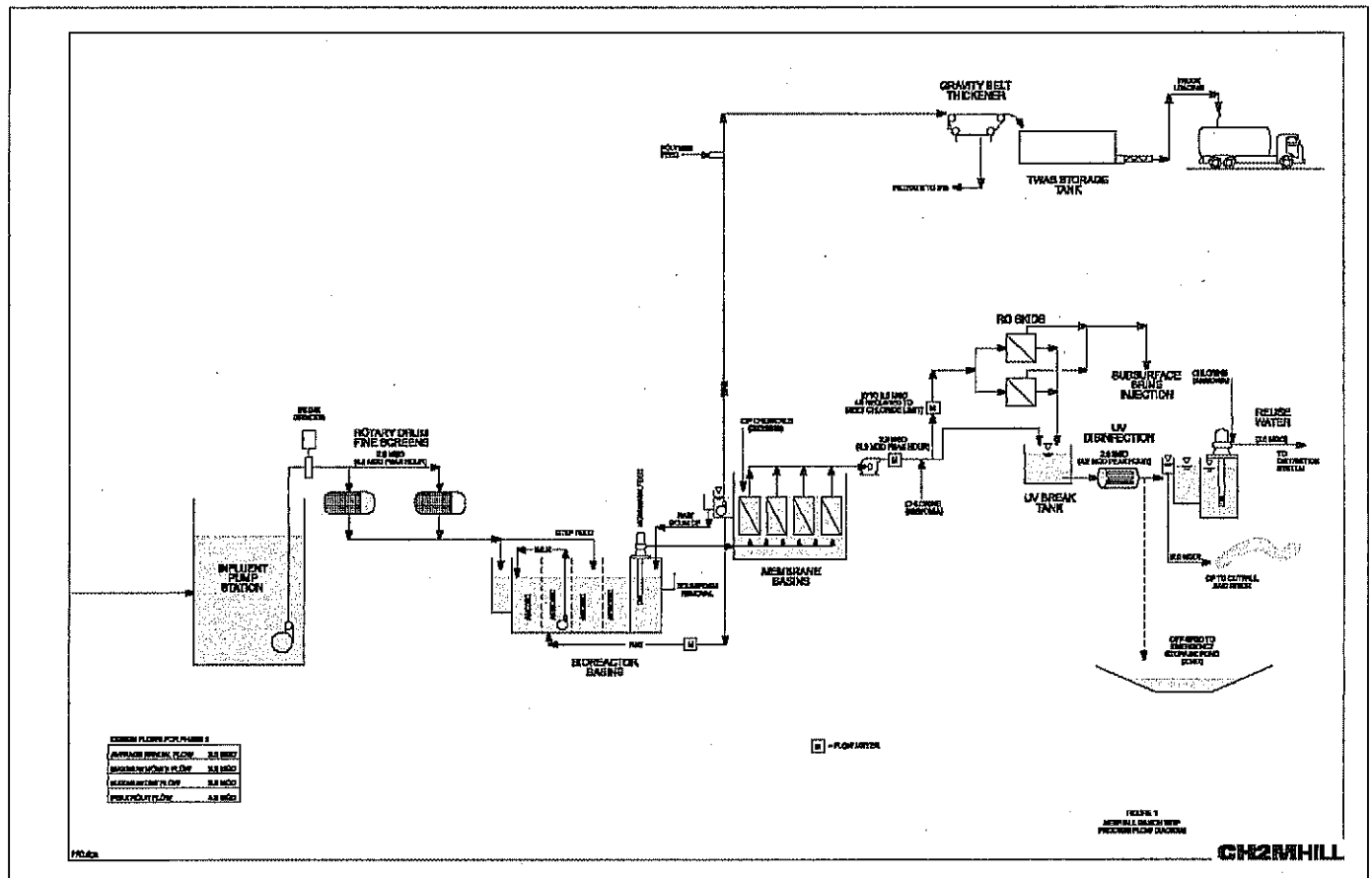
90th Percentile of Observed Data is the measurement in the ordered set of data (lowest to highest) where 90 percent of the reported measurements are less than or equal to that value.

ATTACHMENT B – MAP



ATTACHMENT C – FLOW SCHEMATIC

Phase I



ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)
2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 C.F.R. § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 C.F.R. § 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 C.F.R. § 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 C.F.R. § 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

G. Bypass

1. Definitions

- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
- b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does

- not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)
 3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
 4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)
 5. Notice
 - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)
2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or

termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

- A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)
- B.** Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

- A.** Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)
- B. Records of monitoring information shall include:**

- 1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)
2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 C.F.R. § 122.22(a)(3).)

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and
 - c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 C.F.R. § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.22(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):
 - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 C.F.R. § 122.41(l)(1)(ii).)
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R. § 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 C.F.R. § 122.41(l)(2).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 C.F.R. § 122.41(l)(7).)

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

- A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Publicly-Owned Treatment Works (POTWs)

All POTWs shall provide adequate notice to the Regional Water Board of the following (40 C.F.R. § 122.42(b)):

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the CWA if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)); and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order. (40 C.F.R. § 122.42(b)(2).)
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A.** All samples shall be representative of the waste discharge under conditions of peak load. Quarterly effluent analyses shall be performed during the months of January, April, July, and October. Semiannual analyses shall be performed during the months of January and July. Annual analyses shall be performed during the month of July (except for bioassessment monitoring, which will be conducted in the spring/summer). Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Regional Water Board, state the reason why monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of quarterly, semiannual, and annual analyses shall be reported in the third monthly monitoring report following the analysis.
- B.** Pollutants shall be analyzed using the analytical methods described in 40 CFR, Part 136.3, 136.4, and 136.5 (revised March 12, 2007); or where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.
- C.** Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR, Part 136.3. All QA/QC analyses must be run on the same dates that samples are actually analyzed. The Discharger shall retain the QA/QC documentation in its files and make available for inspection and/or submit them when requested by the Regional Water Board. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the monthly report.
- D.** The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.

- E. For any analyses performed for which no procedure is specified in the USEPA guidelines, or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.
- F. Each monitoring report must affirm in writing that "all analyses were conducted at a laboratory certified for such analyses by the Department of Health Services or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this MRP."
- G. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL), the minimum level (ML), and the Reported Minimum Level (RML) for each pollutant. The MLs are those published by the State Water Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, February 9, 2005, Appendix 4. The ML represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interference. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the method analytical procedures, such as dilution or concentration of samples, other factors may be applied to the ML depending on the sample preparation. The resulting value is the reported minimum level.
- H. The Discharger shall select the analytical method that provides a ML lower than the permit limit established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR, Part 136, and obtains approval for a higher ML from the Executive Officer, as provided for in Section J below. If the effluent limitation is lower than all the MLs in Appendix 4, SIP, the Discharge must select the method with the lowest ML for compliance purposes. The Discharger shall include in the Annual Summary Report a list of the analytical methods employed for each test.
- I. The Discharger shall instruct its laboratories to establish calibration standards so that the ML (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve. In accordance with section J, below, the Discharger's laboratory may employ a calibration standard lower than the ML in Appendix 4 of the SIP.
- J. In accordance with Section 2.4.3 of the SIP, the Regional Water Board Executive Officer, in consultation with the State Water Board's Quality Assurance Program Manager, may establish an ML that is not contained in Appendix 4 of the SIP to be included in the discharger's permit in any of the following situations:

- a. When the pollutant under consideration is not included in Appendix 4, SIP;
- b. When the discharger and the Regional Water Board agree to include in the permit a test method that is more sensitive than those specified in 40 CFR, Part 136 (revised as of March 12, 2007);
- c. When a discharger agrees to use an ML that is lower than those listed in Appendix 4;
- d. When a discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix 4 and proposes an appropriate ML for the matrix; or,
- e. When the discharger uses a method, which quantification practices are not consistent with the definition of the ML. Examples of such methods are USEPA-approved method 1613 for dioxins, and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the discharger, the Regional Water Board, and the State Water Resources Control Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

If there is any conflict between foregoing provisions and the State Implementation Policy (SIP), the provisions stated in the SIP (Section 2.4) shall prevail.

- K.** If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this Program using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with average effluent, receiving water, etc., limitations.
- L.** The Discharger shall develop and maintain a record of all spills or bypasses of raw or partially treated sewage from its collection system or treatment plant according to the requirements in the WDR section of this Order. This record shall be made available to the Regional Water Board upon request and a spill summary shall be included in the annual summary report.
- M.** For all bacteriological analyses, sample dilutions should be performed so the expected range of values is bracketed (for example, with multiple tube fermentation method or membrane filtration method, 2 to 16,000 per 100 ml for total and fecal coliform, at a minimum, and 1 to 1000 per 100 ml for enterococcus). The detection methods used for each analysis shall be reported with the results of the analyses.
 - a. Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR, Part 136 (revised March 12, 2007), unless alternate methods

have been approved in advance by the United State Environmental Protection Agency (USEPA) pursuant to 40 CFR Part 136.

- b. Detection methods used for enterococcus shall be those presented in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure* or any improved method determined by the Regional Water Board to be appropriate.

- N. Since compliance monitoring focuses on the effects of a point source discharge, it is not designed to assess impacts from other sources of pollution (e.g., non-point source runoff, aerial fallout) or to evaluate the current status of important ecological resources on a regional basis.

A watershed-wide Monitoring Program will be developed within two years from the effective date of this Order and permit for the Santa Clara River Watershed, under the leadership of the Regional Water Board and the stakeholder groups developing salt and nutrient TMDLs that the Santa Clara River Watershed and in compliance with those TMDLs. The goals of the watershed-wide monitoring program will include evaluating or assessing: compliance with receiving water objectives, trends in surface water quality, impacts to beneficial uses, the health of the biological community, data needs for modeling contaminants of concern, and attaining the goals of the TMDLs under implementation in the Santa Clara River. The Discharger shall participate in the development and implementation of the watershed-wide monitoring program, and submit a copy of the proposed program to the Regional Water Board,

Changes to the compliance monitoring program may be required to fulfill the goals of the watershed-wide monitoring program, while retaining the compliance monitoring component required to evaluate compliance with the NPDES permit. Revisions to the Discharger's program will be made under the direction of the Regional Water Board, as necessary, to accomplish the goal, and may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, and/or the number of samples collected.

Until such time when a watershed-wide monitoring program is developed, Newhall Land shall implement the monitoring program in the following sections.

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table 1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description (include Latitude and Longitude when available)
--	INF-001	Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained.
001	EFF-001	The effluent sampling station shall be located downstream of any inplant return flows and after the final disinfection process, where representative samples of the effluent can be obtained. Latitude 34°0.403166' and Longitude 118°0.689667'
--	RSW-001U	Santa Clara River, approximately 100 feet upstream of the discharge point
--	RSW-001D	Santa Clara River, approximately 100 feet downstream of the discharge point
--	RSW-002D*	Santa Clara River, approximately 300 feet downstream of the discharge point
--	RGW-001	Groundwater aquifer, upgradient of discharge point
--	RGW-002	Groundwater aquifer, downgradient of discharge point
--	RGW-003	Groundwater aquifer, downgradient of discharge point

- * The location of this receiving water station may vary depending upon the meander of the river. The Discharger shall endeavor to take a sample representative of actual downstream receiving water conditions, after flows are commingled. However, if flows do not commingle, the receiving water sample shall still be collected. The monitoring report shall specify whether or not there was commingling.

III. INFLUENT MONITORING REQUIREMENTS

Influent monitoring is required to:

- Determine compliance with NPDES permit conditions.
- Assess treatment plant performance.
- Assess effectiveness of the Pretreatment Program

A. Monitoring Location INF-001

1. The Discharger shall monitor influent to the facility at INF-001 as follows:

Table 2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	mgd	recorder	continuous ¹	²
pH	pH unit	grab	daily	²

¹ Total daily flow and instantaneous peak daily flow (24-hr basis). Actual monitored flow shall be reported (not the maximum flow, i.e., design capacity).

² Pollutants shall be analyzed using the analytical methods described in 40 CFR 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Resources Control Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total suspended solids	mg/L	24-hour composite	daily	2
BOD ₅ 20°C	mg/L	24-hour composite	daily	2
Nitrite nitrogen	mg/L	24-hour composite	weekly	2
Nitrate nitrogen	mg/L	24-hour composite	weekly	2
Ammonia nitrogen	mg/L	24-hour composite	weekly	2
Total Nitrogen	mg/L	24-hour composite	weekly	2
Total phosphorus	mg/L	24-hour composite	weekly	2
Orthophosphate-P	mg/L	24-hour composite	weekly	2
Chloride	mg/L	24-hour composite	monthly	2
Antimony	µg/L	24-hour composite	monthly	2
Arsenic	µg/L	24-hour composite	monthly	2
Cadmium	µg/L	24-hour composite	quarterly	2
Chromium III	µg/L	grab	quarterly	2
Chromium VI	µg/L	grab	quarterly	2
Copper	µg/L	24-hour composite	monthly	2
Lead	µg/L	24-hour composite	monthly	2
Mercury	µg/L	24-hour composite	monthly	2
Selenium	µg/L	24-hour composite	quarterly	2
Silver	µg/L	24-hour composite	quarterly	2
Thallium	µg/L	24-hour composite	quarterly	2
Zinc	µg/L	24-hour composite	quarterly	2
Cyanide	µg/L	grab	quarterly	2
Acrylonitrile	µg/L	grab	quarterly	2
Tetrachloroethylene	µg/L	grab	quarterly	2
Bis(2-ethylhexyl)phthalate	µg/L	grab	quarterly	2
p-Dichlorobenzene	µg/L	grab	quarterly	2
Lindane	µg/L	grab	quarterly	2
4,4-DDE	µg/L	grab	quarterly	2
Iron	µg/L	24-hour composite	quarterly	2
Remaining EPA priority pollutants ³ excluding asbestos	µg/L	24-hour composite/grab for VOCs	semiannually	2

Influent monitoring must be performed at plant start-up.

IV. EFFLUENT MONITORING REQUIREMENTS

Effluent monitoring is required to:

- Determine compliance with NPDES permit conditions and water quality standards.

³ Priority pollutants are those constituents referred to in 40 CFR 401.15; a list of these pollutants is provided as Appendix A to 40 CFR 423.

- Assess plant performance, identify operational problems and improve plant performance.
- Provide information

A. Monitoring Location EFF-001

1. The Discharger shall monitor the discharge of tertiary-treated effluent at EFF-001 as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table 3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Total waste flow	mgd	recorder	continuous ⁴	4
Turbidity ⁷	NTU	recorder	continuous	5
Total residual chlorine	mg/L	grab	daily ⁶	5
Total coliform ⁷	MPN/ 100mL	grab	daily	5
Fecal coliform ⁷	MPN/ 100mL	grab	daily	5
E.coli	MPN/ 100mL	grab	daily ⁸	5
Temperature	°F	grab	daily	5
pH	pH units	grab	daily	5
Settleable solids	mL/L	grab	daily	5
Suspended solids	mg/L	24-hour composite	weekly	5
BOD ₅ 20°C	mg/L	24-hour composite	weekly ⁹	5
Oil and grease	mg/L	grab	monthly	5

- ⁴ Where continuous monitoring of a constituent is required, the following shall be reported:
Total waste flow – Total daily and peak daily flow (24-hr basis);
Turbidity – Maximum daily value, total amount of time each day the turbidity exceeded 0.2 turbidity units, flow-proportioned average daily value.
- ⁵ Pollutants shall be analyzed using the analytical methods described in 40 CFR 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Resources Control Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.
- ⁶ Daily grab samples shall be collected at monitoring location EFF-001B, Monday through Friday only, except for holidays. Analytical results of daily grab samples will be used to determine compliance with total residual chlorine effluent limitation.
- ⁷ Coliform and turbidity samples shall be obtained at some point in the treatment process at a time when wastewater flow and characteristics are most demanding on the treatment facilities, filtration, and disinfection procedures. Fecal coliform testing shall be conducted only if total coliform test result is positive.
- ⁸ E. coli testing shall be conducted only if fecal coliform testing is positive. If the fecal coliform analysis results in no detection, a result of less than (<) the reporting limit for fecal coliform will be reported for E. coli.
- ⁹ If the result of the weekly BOD analysis yields a value greater than the 30-day average limit, the frequency of analysis shall be increased to daily within one week of knowledge of the test result for at least 30 days and until compliance with the 7-day and 30-day average BOD limits is demonstrated; after which the frequency shall revert to weekly.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Dissolved oxygen	mg/L	grab	weekly	5
Total dissolved solids	mg/L	24-hour composite	monthly	5
Chloride	mg/L	24-hour composite	monthly	5
Sulfate	mg/L	24-hour composite	monthly	5
Boron	mg/L	24-hour composite	monthly	5
Fluoride	mg/L	24-hour composite	monthly	5
Ammonia Nitrogen ¹⁰	mg/L	24-hour composite	weekly	5
Nitrite nitrogen	mg/L	24-hour composite	weekly	5
Nitrate nitrogen	mg/L	24-hour composite	weekly	5
Organic nitrogen	mg/L	24-hour composite	weekly	5
Total nitrogen	mg/L	24-hour composite	weekly	5
Surfactants (MBAS) ¹¹	mg/L	24-hour composite	monthly	5
Surfactants (CTAS)	mg/L	24-hour composite	monthly	5
Total hardness (CaCO ₃)	mg/L	24-hour composite	weekly	5
Chronic toxicity	TUc	24-hour composite	monthly	5
Acute toxicity	% Survival	24-hour composite	monthly	5
Perchlorate	µg/L	grab	semiannually	5
1,4-Dioxane	µg/L	grab	semiannually	5
1,2,3-Trichloropropane	µg/L	grab	semiannually	5
Methyl tert-butyl ether (MTBE)	µg/L	grab	semiannually	5
Antimony	µg/L	24-hour composite	monthly	5
Arsenic	µg/L	24-hour composite	monthly	5
Beryllium	µg/L	24-hour composite	monthly	5
Cadmium	µg/L	24-hour composite	monthly	5
Chromium III	µg/L	grab	monthly	5
Chromium VI	µg/L	grab	monthly	5
Copper	µg/L	24-hour composite	monthly	5
Lead	µg/L	24-hour composite	monthly	5
Mercury	µg/L	24-hour composite	monthly	5
Nickel	µg/L	24-hour composite	monthly	5
Selenium	µg/L	24-hour composite	monthly	5
Silver	µg/L	24-hour composite	monthly	5
Thallium	µg/L	24-hour composite	monthly	5

¹⁰ Nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, organic nitrogen, pH, and temperature sampling shall be conducted concurrently.

¹¹ MBAS is Methylene blue active substances and CTAS is cobalt thiocyanate active substances. Reaches of the Santa Clara River are unlined in several reaches downstream of the points of wastewater discharge and are designated with the beneficial use of groundwater recharge (GWR) in the Basin Plan. Monitoring is required to assess compliance with the Title 22-based limit prescribed to protect underlying groundwater quality with the MUN beneficial use.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Zinc	µg/L	24-hour composite	monthly	5
Cyanide	µg/L	grab	monthly	5
2,3,7,8-TCDD ¹²	µg/L	24-hour composite	quarterly	5
Acrylonitrile	µg/L	grab	quarterly	5
Bromoform	µg/L	grab	quarterly	5
Dibromochloromethane	µg/L	grab	quarterly	5
Chloroform	µg/L	grab	quarterly	5
Bromodichloromethane	µg/L	grab	quarterly	5
1,2-Dichloroethane	µg/L	grab	quarterly	5
Methyl bromide (Bromomethane)	µg/L	grab	quarterly	5
Methyl chloride (Chloromethane)	µg/L	grab	quarterly	5
Methylene chloride	µg/L	grab	quarterly	5
Tetrachloroethylene	µg/L	grab	quarterly	5
Benzidine	µg/L	24-hour composite	quarterly	5
Benzo(a)anthracene	µg/L	24-hour composite	quarterly	5
Bis(2-ethylhexyl)phthalate	µg/L	24-hour composite	quarterly	5
p-Dichlorobenzene (1,4-Dichlorobenzene)	µg/L	24-hour composite	quarterly	5
3,3-Dichlorobenzidine	µg/L	24-hour composite	quarterly	5
1,2-Diphenylhydrazine	µg/L	24-hour composite	quarterly	5
Hexachlorobenzene	µg/L	24-hour composite	quarterly	5
Aldrin	µg/L	24-hour composite	quarterly	5
Gamma-BHC(Lindane)	µg/L	24-hour composite	quarterly	5
Chlordane	µg/L	24-hour composite	quarterly	5
4,4-DDT	µg/L	24-hour composite	quarterly	5
4,4-DDE	µg/L	24-hour composite	quarterly	5
4,4-DDD	µg/L	24-hour composite	quarterly	5
Dieldrin	µg/L	24-hour composite	quarterly	5

¹² In accordance with the SIP, the Discharger shall conduct effluent monitoring for the seventeen 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD or dioxin) congeners in the effluent and in the receiving water Station RSW-002D, located downstream of the discharge point. The Discharger shall use the appropriate Toxicity Equivalence Factor (TEF) to determine Toxic Equivalence (TEQ). Where TEQ equals the product between each of the 17 individual congeners' (i) concentration analytical result (C_i) and their corresponding Toxicity Equivalence Factor (TEF_i), (i.e., TEQ_i = C_i x TEF_i). Compliance with the Dioxin limitation shall be determined by the summation of the seventeen individual TEQs, or the following equation:

$$\text{Dioxin concentration in effluent} = \sum_{i=1}^{17} (\text{TEQ}_i) = \sum_{i=1}^{17} (C_i)(\text{TEF}_i)$$

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
Endrin	µg/L	24-hour composite	quarterly	5
Heptachlor	µg/L	24-hour composite	quarterly	5
Heptachlor epoxide	µg/L	24-hour composite	quarterly	5
PCBs	µg/L	24-hour composite	quarterly	5
Toxaphene	µg/L	24-hour composite	quarterly	5
Barium	µg/L	24-hour composite	quarterly	5
Iron	µg/L	24-hour composite	quarterly	5
Methoxychlor	µg/L	24-hour composite	quarterly	5
2,4-D	µg/L	24-hour composite	quarterly	5
2,4,5-TP (Silvex)	µg/L	24-hour composite	quarterly	5
Remaining EPA priority pollutants (except asbestos)	µg/L	24-hour composite; grab for VOCs	semiannually	5
Radioactivity (Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 and uranium)	PCi/L	24-hour composite	quarterly	13

Effluent monitoring shall be performed at plant start-up.

B. Other Effluent Monitoring Location

1. Not Applicable. The Discharger only proposes to have one effluent discharge point.

Table 4. Other Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method and (Minimum Level, units), respectively
N/A				

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity

1. Definition of Acute Toxicity

¹³ Analyze these radiochemicals by the following USEPA methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium. Analysis for combined Radium-226 & 228 shall be conducted only if gross alpha results for the same sample exceed 15 pCi/L or beta greater than 50 pCi/L. If Radium-226 & 228 exceeds the stipulated criteria, analyze for Tritium, Strontium-90 and uranium.

Acute toxicity is a measure of primarily lethal effects that occur over a 96-hour period. Acute toxicity shall be measured in percent survival measured in undiluted (100%) effluent.

- a. The average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and
- b. No single test shall produce less than 70% survival.

2. Acute Toxicity Effluent Monitoring Program

- a. **Method.** The Discharger shall conduct acute toxicity tests on 100% effluent and receiving water grab samples by methods specified in 40 CFR Part 136, which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, October, 2002 (EPA-821-R-02-012) or a more recent edition to ensure compliance.
- b. **Test Species.** The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish discharges. However, if the salinity of the receiving water is between 1 to 32 parts per thousand (ppt), the Discharger may have the option of using the inland silverside, *Menidia beryllina*, instead of the topsmelt. The method for topsmelt is found in USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, October, 2002 (EPA-821-R-02-012).
- c. **Alternate Reporting.** In lieu of conducting the standard acute toxicity testing with the fathead minnow, the Discharger may elect to report the results or endpoint from the first 96 hours of the chronic toxicity test as the results of the acute toxicity test, but only if the Discharger uses USEPA's October 2002 protocol (EPA-821-R-02-013) and fathead minnow is used to conduct the chronic toxicity test.
- d. **Acute Toxicity Accelerated Monitoring.** If either of the effluent or receiving water toxicity requirements in Section IV.A.1.c.(i) and (ii), and Section V.A.17.c. respectively, of this Order is not met, the Discharger shall conduct six additional tests approximately every two weeks, over a six-week period. The Discharger shall ensure that results of a failing acute toxicity test are received by the Discharger within 24 hours of completion of the test and the additional tests shall begin within 5 business days of receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing.

However, if the extent of the acute toxicity of the receiving water upstream of the discharge is greater than the downstream and the results of the effluent acute toxicity test comply with acute toxicity limitation, the accelerated monitoring need not be implemented for the receiving water.

e. Toxicity Identification Evaluation (TIE).

1. If the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.
2. If the initial test and any of the additional six acute toxicity bioassay tests results are less than 70% survival, the Discharger shall immediately implement Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan. Once the sources are identified the Discharger shall take all reasonable steps to reduce toxicity to meet the requirements.

B. Chronic Toxicity Testing

1. Definition of Chronic Toxicity

Chronic toxicity is a measure of adverse sub-lethal effects in plants, animals, or invertebrates in a long-term test. The effects measured may include lethality or decreases in fertilization, growth, and reproduction.

2. Chronic Toxicity Effluent Monitoring Program

- a. **Test Methods.** The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite 100 % effluent samples or receiving water samples in accordance with EPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, October 2002 (EPA-821-R-02-013) or EPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, October 2002 (EPA-821-R-02-014), or current version.

b. Frequency

1. **Screening and Monitoring.** - The Discharger shall conduct the first chronic toxicity test screening for three consecutive months beginning from the date of initial discharge. The Discharger shall conduct short-term tests with the cladoceran, water flea (*Ceriodaphnia dubia* - survival and reproduction test), the fathead minnow (*Pimephales promelas* - larval survival and growth test), and the green alga (*Selenastrum capricornutum* - growth test) as an initial screening process for a minimum of three, but not to exceed, five suites of tests to account for potential variability of the effluent / receiving water. After this screening period, monitoring shall be conducted using the most sensitive species.

2. **Re-screening** Re-screening is required every 24 months. The Discharger shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive then the re-screening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.
3. **Regular toxicity tests** - After the screening period, monitoring shall be conducted monthly using the most sensitive species.
- c. **Toxicity Units.** The chronic toxicity of the effluent shall be expressed and reported in Chronic Toxic Units, TUC, where,

$$TUC = \frac{100}{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

3. Accelerated Monitoring

If the chronic toxicity of the effluent or the receiving water downstream the discharge exceeds the monthly trigger median of 1.0 TUC, the Discharger shall conduct six additional tests, approximately every two weeks, over a 12-week period. The Discharger shall ensure that they receive results of a failing chronic toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 5 business days of the receipt of the result. However, if the chronic toxicity of the receiving water upstream of the discharge is greater than the downstream and the TUC of the effluent chronic toxicity test is less than or equal to a monthly median of 1 TUC trigger, then accelerated monitoring need not be implemented for the receiving water.

- a. If any three out of the initial test and the six additional tests results exceed 1.0 TUC the Discharger shall immediately implement the Initial Investigation TRE workplan.
- b. If implementation of the initial investigation TRE workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the normal sampling frequency required in Table 3 and Table 4 of this MRP.

- c. If all of the six additional tests required above do not exceed 1 TUc, then the Discharger may return to the normal sampling frequency.
- d. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

C. Quality Assurance

1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).
2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manual (EPA-821-R-02-012 and/or EPA-821-R-02-013), then the Discharger must re-sample and re-test within 14 days.
3. Control and dilution water should be receiving water or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

D. Preparation of an Initial Investigation TRE Workplan

The Discharger shall prepare and submit a copy of the Discharger's initial investigation Toxicity Reduction Evaluation (TRE) workplan to the Executive Officer of the Regional Water Board for approval within 90 days of the effective date of this permit. If the Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use USEPA manual EPA/833B-99/002 (municipal) as guidance, or most current version. At a minimum, the TRE Workplan must contain the provisions in Attachment G. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

1. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
2. A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the facility; and,
3. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP Section V.E.3 for guidance manuals.

E. Steps in Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE)

1. If results of the implementation of the facility's initial investigation TRE workplan indicate the need to continue the TRE/TIE, the Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 15 days of completion of the initial investigation TRE. The detailed workplan shall include, but not be limited to:
 - a. Further actions to investigate and identify the cause of toxicity;
 - b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and
 - c. A schedule for these actions.
2. The following section summarizes the stepwise approach used in conducting the TRE:
 - a. Step 1 includes basic data collection.
 - b. Step 2 evaluates optimization of the treatment system operation, facility housekeeping, and selection and use of in-plant process chemicals.
 - c. If Steps 1 and 2 are unsuccessful, Step 3 implements a Toxicity Identification Evaluation (TIE) and employment of all reasonable efforts using currently available TIE methodologies. The objective of the TIE shall be to identify the substance or combination of substances causing the observed toxicity.
 - d. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options.
 - e. Step 5 evaluates in-plant treatment options.
 - f. Step 6 consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of compliance with those requirements may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there are no longer toxicity violations.

3. The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute manual, chronic manual, EPA/600/R-96-054 (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III), as guidance.
4. If a TRE/TIE is initiated prior to completion of the accelerated testing required in Section V.D. of this program, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.
5. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance, if appropriate.
6. The Regional Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Board will be based, in part, on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.
 - a. If all the results of the six additional tests are in compliance with the chronic toxicity limitation, the Discharger may resume regular monthly testing.
 - b. If the results of any of the six accelerated tests exceeds the limitation, the Discharger shall continue to monitor bi-weekly until six consecutive weekly tests are in compliance. At that time, the Discharger may resume regular monthly testing.
 - c. If the results of two of the six tests, or any two tests in a six-week period, exceed the limitation, the Discharger shall initiate a TRE.
 - d. If implementation of the initial investigation TRE workplan (see item D.3, above) indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the regular testing frequency.

F. Ammonia Removal

1. Except with prior approval from the Executive Officer of the Regional Water Board, ammonia shall not be removed from bioassay samples. The Discharger must demonstrate the effluent toxicity is caused by ammonia *because of increasing test pH* when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate that the toxicity is caused by ammonia and not other toxicants before the Executive Officer would allow for control of pH in the test.

- a. There is consistent toxicity in the effluent and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.
 - b. Chronic ammonia concentrations in the effluent are greater than 4 mg/L total ammonia.
 - c. Conduct graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.
 - d. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.
2. When it has been demonstrated that toxicity is due to ammonia because of increasing test pH, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent, after submitting a written request to the Regional Water Board, and receiving written permission expressing approval from the Executive Officer of the Regional Water Board.

G. Reporting

The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month, as required by this permit. Test results shall be reported in percent Survival (% Survival) for Acute Toxicity and Chronic Toxicity Units (TUC) for chronic toxicity, as required, with the self-monitoring report (SMR) for the month in which the test is conducted. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to Section V.A.2.d and V.B.3, then those results also shall be submitted with the SMR for the period in which the Investigation occurred.

1. The full report shall be received by the Regional Water Board by the 15th day of the third month following sampling.
2. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the toxicity trigger; and, (4) printout of the toxicity program (ToxCalc or CETIS).
3. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the SMR. Routine reporting shall include, at a minimum, as applicable, for each test, as appropriate:
 - a. sample date(s)
 - b. test initiation date

- c. test species
 - d. end point value(s) for each dilution (e.g. number of young, growth rate, percent survival)
 - e. NOEC values in percent effluent
 - f. TUc value(s), where $TU_c = \frac{100}{NOEC}$
 - g. Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable)
 - h. NOEC and LOEC (Lowest Observable Effect Concentration) values for reference toxicant test(s)
 - i. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).
4. The Discharger shall provide a compliance summary that includes a summary table of toxicity data from at least eleven of the most recent samples.
5. The Discharger shall notify this Regional Water Board immediately of any toxicity trigger exceedance and in writing 14 days after the receipt of the results of the exceedance. The notification will describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

Not Applicable.

VII. RECLAMATION MONITORING REQUIREMENTS

Not applicable. Water Recycling Requirements (WRR) monitoring will be required in a separate Order.

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

A. Monitoring Location RSW-001U and RSW-002D

1. The Discharger shall monitor The Santa Clara River at RSW-001U and RSW-002D as follows:

Table 7a.1. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total waste flow	mgd	grab	weekly	¹⁴
Turbidity	NTU	grab	weekly	14
Total residual chlorine	mg/L	grab	weekly	14
Total coliform	MPN/ 100mL	grab	daily	14
Fecal coliform	MPN/ 100mL	grab	daily	14
E.coli	MPN/ 100mL	grab	daily ¹⁵	14
Temperature ¹⁶	°F	grab	daily	14
pH ¹⁶	pH units	grab	daily	14
Settleable solids	mL/L	grab	daily	14
Suspended solids	mg/L	grab	weekly	14
BOD ₅ 20°C	mg/L	grab	weekly	14
Oil and grease	mg/L	grab	monthly	14
Dissolved oxygen	mg/L	grab	weekly	14
Total dissolved solids	mg/L	grab	monthly	14
Chloride	mg/L	grab	monthly	14
Sulfate	mg/L	grab	monthly	14
Boron	mg/L	grab	monthly	14
Fluoride	mg/L	grab	quarterly	14
Ammonia Nitrogen ¹⁶	mg/L	grab	weekly	14
Nitrite nitrogen ¹⁶	mg/L	grab	weekly	14
Nitrate nitrogen ¹⁶	mg/L	grab	weekly	14
Organic nitrogen ¹⁶	mg/L	grab	weekly	14
Total nitrogen	mg/L	grab	weekly	14
Total phosphorus	mg/L	grab	monthly	14
Orthophosphate-P	mg/L	grab	monthly	14
Algal biomass ¹⁷	mg/L	grab	monthly	14

¹⁴ Pollutants shall be analyzed using the analytical methods described in 40 CFR 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Resources Control Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.

¹⁵ E. coli testing shall be conducted only if fecal coliform testing is positive. If the fecal coliform analysis results in no detection, a result of less than (<) the reporting limit for fecal coliform will be reported for E. coli.

¹⁶ Nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, organic nitrogen, pH, and temperature sampling shall be conducted concurrently.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Surfactants (MBAS) ¹⁸	mg/L	grab	monthly	14
Surfactants (CTAS) ¹⁸	mg/L	grab	monthly	14
Total hardness (CaCO ₃)	mg/L	grab	weekly	14
Chronic toxicity	TUc	grab	monthly	14
Acute toxicity	% Survival	grab	monthly	14
Perchlorate	µg/L	grab	semiannually	14
1,4-Dioxane	µg/L	grab	semiannually	14
1,2,3-Trichloropropane	µg/L	grab	semiannually	14
Methyl tert-butyl ether (MTBE)	µg/L	grab	semiannually	14
Antimony	µg/L	grab	monthly	14
Arsenic	µg/L	grab	monthly	14
Beryllium	µg/L	grab	semiannually	14
Cadmium	µg/L	grab	quarterly	14
Chromium III	µg/L	grab	quarterly	14
Chromium VI	µg/L	grab	quarterly	14
Copper	µg/L	grab	monthly	14
Lead	µg/L	grab	monthly	14
Mercury	µg/L	grab	monthly	14
Nickel	µg/L	grab	monthly	14
Selenium	µg/L	grab	monthly	14
Silver	µg/L	grab	quarterly	14
Thallium	µg/L	grab	quarterly	14
Zinc	µg/L	grab	monthly	14
Cyanide	µg/L	grab	monthly	14
2,3,7,8-TCDD ¹⁹	µg/L	grab	semiannually	14

¹⁷ Algal biomass or Chlorophyll A samples shall be collected by obtaining scrapings from the substrate. This will be a measure of benthic algae, rather than algae in the water column. Percent cover shall also be reported.

¹⁸ MBAS is Methylene blue active substances and CTAS is cobalt thiocyanate active substances. Reaches of the Santa Clara River are unlined in several reaches downstream of the points of wastewater discharge and are designated with the beneficial use of groundwater recharge (GWR) in the Basin Plan. Monitoring is required to assess compliance with the Title 22-based limit prescribed to protect underlying groundwater quality with the MUN beneficial use.

¹⁹ In accordance with the SIP, the Discharger shall conduct effluent monitoring for the seventeen 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD or dioxin) congeners in the effluent and in the receiving water Station RSW-002D, located downstream of the discharge point. The Discharger shall use the appropriate Toxicity Equivalence Factor (TEF) to determine Toxic Equivalence (TEQ). Where TEQ equals the product between each of the 17 individual congeners' (i) concentration analytical result (C_i) and their corresponding Toxicity Equivalence Factor (TEF_i), (i.e., TEQ_i = C_i x TEF_i). Compliance with the Dioxin limitation shall be determined by the summation of the seventeen individual TEQs, or the following equation:

$$\text{Dioxin concentration in effluent} = \sum_{i=1}^{17} (\text{TEQ}_i) = \sum_{i=1}^{17} (C_i)(\text{TEF}_i)$$

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Acrylonitrile	µg/L	grab	monthly	14
Bromoform	µg/L	grab	quarterly	14
Dibromochloromethane	µg/L	grab	quarterly	14
Chloroform	µg/L	grab	quarterly	14
Bromodichloromethane	µg/L	grab	quarterly	14
1,2-Dichloroethane	µg/L	grab	semiannually	14
Methyl bromide (Bromomethane)	µg/L	grab	semiannually	14
Methyl chloride (Chloromethane)	µg/L	grab	semiannually	14
Methylene chloride	µg/L	grab	semiannually	14
Tetrachloroethylene	µg/L	grab	monthly	14
Benzidine	µg/L	grab	semiannually	14
Benzo(a)anthracene	µg/L	grab	semiannually	14
Bis(2-ethylhexyl)phthalate	µg/L	grab	quarterly	14
p-Dichlorobenzene (1,4-Dichlorobenzene)	µg/L	grab	quarterly	14
3,3-Dichlorobenzidine	µg/L	grab	semiannually	14
1,2-Diphenylhydrazine	µg/L	grab	semiannually	14
Hexachlorobenzene	µg/L	grab	semiannually	14
Aldrin	µg/L	grab	semiannually	14
Gamma-BHC(Lindane)	µg/L	grab	semiannually	14
Chlordane	µg/L	grab	semiannually	14
4,4-DDT	µg/L	grab	semiannually	14
4,4-DDE	µg/L	grab	semiannually	14
4,4-DDD	µg/L	grab	semiannually	14
Dieldrin	µg/L	grab	semiannually	14
Endrin	µg/L	grab	semiannually	14
Heptachlor	µg/L	grab	semiannually	14
Heptachlor epoxide	µg/L	grab	semiannually	14
Diazinon ²⁰	µg/L	grab	semiannually	14
PCBs	µg/L	grab	semiannually	14
Toxaphene	µg/L	grab	semiannually	14
Barium	µg/L	grab	semiannually	14
Iron	µg/L	grab	monthly	14
Methoxychlor	µg/L	grab	semiannually	14
2,4-D	µg/L	grab	semiannually	14
2,4,5-TP (Silvex)	µg/L	grab	semiannually	14
Remaining EPA priority pollutants (except for asbestos)	µg/L	grab	semiannually	14

²⁰ Diazinon sampling shall be conducted concurrently with the receiving water chronic toxicity sampling.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Radioactivity(Including gross alpha, gross beta, combined radium-226 and radium-228, tritium, strontium-90 and uranium) ²¹	PCi/L	grab	semiannually	14

Receiving water samples need not be collected during months in which there is no discharge to the Santa Clara River. However, a minimum of two samples per year, for each constituent, are required to be collected.

2. The Discharger shall monitor the Santa Clara River at a receiving water station RSW-001D located 100 feet downstream of the discharge as follows:

Table 7.a.2. Ammonia Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Temperature	°F	grab	monthly	14
pH	pH units	grab	monthly	14
Ammonia Nitrogen	mg/L	grab	monthly	14
Acute Toxicity	% Survival	grab	monthly	14
Chronic Toxicity	TUc	grab	monthly	14

a. Toxicity Testing Requirement

- i. Acute Toxicity – For this particular testing, only Fathead Minnow shall be used as the test species.
- ii. Chronic Toxicity testing procedures shall follow the requirements described in Section V.B. of the MRP.

b. Ambient Receiving Water Requirements

The Discharger shall delineate the pH and temperature of the ambient receiving water conditions within 100 feet downstream from the point of discharge. A workplan describing the pH and temperature fluctuation study shall be submitted to the Executive Officer for Approval within 60 days from the date of adoption of this permit.

²¹

Analyze these radiochemicals by the following USEPA methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium. Analysis for combined Radium-226 & 228 shall be conducted only if gross alpha results for the same sample exceed 15 pCi/L or beta greater than 50 pCi/L. If Radium-226 & 228 exceeds the stipulated criteria, analyze for Tritium, Strontium-90 and uranium.

3. Receiving water samples shall not be taken during or within 48 hours following the flow of rainwater runoff into the Santa Clara River system. Sampling may be rescheduled at receiving water stations if weather and/or flow conditions would endanger personnel collecting receiving water samples. The monthly monitoring report shall note such occasions.

B. Monitoring Location RGW-001, RGW-002, and RGW-003

1. The Discharger shall monitor the groundwater aquifer at RGW-001 (Upgradient well), RGW-002 (Downgradient well) and RGW-003 (Downgradient well) as follows:

Table 7b. Receiving Ground Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Nitrite nitrogen	mg/L	grab	quarterly	1
Nitrate nitrogen	mg/L	grab	quarterly	1
Organic nitrogen	mg/L	grab	quarterly	1
Total nitrogen	mg/L	grab	quarterly	1
Total phosphorus	mg/L	grab	quarterly	1
Orthophosphate-P	mg/L	grab	quarterly	1
Total Dissolved Solids	mg/L	grab	quarterly	1
Chloride	mg/L	grab	quarterly	1
Sulfate	mg/L	grab	quarterly	1
Boron	mg/L	grab	quarterly	1
Methyl tert-butyl ether (MTBE)	µg/L	grab	semiannually	USEPA 8260B (2 µg/L detection limit)
Perchlorate	µg/L	grab	semiannually	USEPA 314 (2 µg/L detection limit)
1,4-Dioxane	µg/L	grab	semiannually	USEPA 8270c (2 µg/L detection limit)
1,2,3-Trichloropropane	µg/L	grab	semiannually	USEPA 504.1 (0.005 µg/L detection limit)

- 1 Pollutants shall be analyzed using the analytical methods described in 40 CFR 136; where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or State Water Resources Control Board. For any pollutant whose effluent limitation is lower than all the minimum levels (MLs) specified in Attachment 4 of the SIP, the analytical method with the lowest ML must be selected.

A workplan for a groundwater monitoring network capable of detecting any impact to the groundwater as a result of Newhall Ranch WRP's discharge, is due to the Regional Water Board 180 days upon the adoption of this Order. Groundwater monitoring shall commence no later than six months before the Newhall Ranch WRP's start-up date.

IX. OTHER MONITORING REQUIREMENTS

A. Watershed Monitoring

The goals of the Watershed-wide Monitoring Program for the Santa Clara River Watershed are to:

- Determine compliance with receiving water limits;
 - Monitor trends in surface water quality;
 - Ensure protection of beneficial uses;
 - Provide data for modeling contaminants of concern;
 - Characterize water quality including seasonal variation of surface waters within the watershed;
 - Assess the health of the biological community; and
 - Determine mixing dynamics of effluent and receiving waters in the estuary.
1. The Discharger shall participate in the implementation of the Watershed-wide Monitoring Program. The District's responsibilities under the Watershed-wide Monitoring Program are described in the Receiving Water Monitoring Requirements section. To achieve the goals of the Watershed-wide Monitoring Program, revisions to the Receiving Water Monitoring Requirements will be made under the direction of USEPA and the Regional Board. The District shall participate with the Santa Clara River Enhancement and Management Plan Steering Committee, and other stakeholders, in the development and implementation of a watershed-wide monitoring program. The Discharger shall submit a draft Watershed-wide Monitoring Program by October 15, 2009, to the Regional Board. In the interim, the Discharger shall submit quarterly progress reports detailing ongoing efforts towards the development of a Watershed-wide Monitoring Program. The first report should be received in the Regional Board office by April 15, 2008.
 2. In coordination with interested stakeholders in the Santa Clara River Watershed, the Discharger shall conduct instream bioassessment monitoring once a year, during the spring/summer period (unless an alternate sampling period is approved by the Executive Officer). Over time, bioassessment monitoring will provide a measure of the physical condition of the waterbody and the integrity of its biological communities.
 - A. The bioassessment program shall include an analysis of the community structure of the instream macroinvertebrate assemblages and physical habitat assessment at the monitoring stations RSW-001U and RSW-002D.

This program shall be implemented by appropriately trained staff. Alternatively, a professional subcontractor qualified to conduct bioassessments may be selected to perform the bioassessment work for the Discharger. Analyses of the results of the bioassessment monitoring program, along with photographs of the monitoring site locations taken during sample collection, shall be submitted in the corresponding annual report. If another stakeholder, or interested party in the watershed subcontracts a

qualified professional to conduct bioassessment monitoring during the same season and at the same location as specified in the MRP, then the Discharger may, in lieu of duplicative sampling, submit the data, a report interpreting the data, photographs of the site, and related QA/QC documentation in the corresponding annual report.

- B. The Discharger must provide a copy of their Standard Operation Procedures (SOPs) for the Bioassessment Monitoring Program to the Regional Board upon request. The document must contain step-by-step field, laboratory and data entry procedures, as well as, related QA/QC procedures. The SOP must also include specific information about each bioassessment program including: assessment program description, its organization and the responsibilities of all its personnel; assessment project description and objectives; qualifications of all personnel; and the type of training each member has received.
- C. Field sampling must conform to the SOP established for the California Stream Bioassessment Procedure (CSBP) or more recently established sampling protocols, such as used by the Surface Water Ambient Monitoring Program (SWAMP). Field crews shall be trained on aspects of the protocol and appropriate safety issues. All field data and sample Chain of Custody (COC) forms must be examined for completion and gross errors. Field inspections shall be planned with random visits and shall be performed by the Discharger or an independent auditor. These visits shall report on all aspects of the field procedure with corrective action occurring immediately.
- D. A taxonomic identification laboratory shall process the biological samples that usually consist of subsampling organisms, enumerating and identifying taxonomic groups and entering the information into an electronic format. The Regional Board may require QA/QC documents from the taxonomic laboratories and examine their records regularly. Intra-laboratory QA/QC for subsampling, taxonomic validation and corrective actions shall be conducted and documented. Biological laboratories shall also maintain reference collections, vouchered specimens (the Discharger may request the return of their sample voucher collections) and remnant collections. The laboratory should participate in an (external) laboratory taxonomic validation program at a recommended level of 10% or 20%. External QA/QC may be arranged through the California Department of Fish and Game's Aquatic Bioassessment Laboratory located in Rancho Cordova, California.

- 3. The Executive Officer of the Regional Water Board may modify Monitoring and Reporting Program to accommodate the watershed-wide monitoring.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
2. If there is no discharge during any reporting period, the report shall so state.
3. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.
4. The Discharger shall inform the Regional Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.
5. Each monthly monitoring report shall include a determination of compliance with receiving water ammonia water quality objectives at RSW-001D. Any exceedances of an ammonia water quality objective shall be noted in the "Summary of Non-Compliance" section of the monitoring report.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. Additionally, the Discharger shall report in the SMR the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, and Pollution Prevention Plan required by Special Provisions of this Order. The Discharger shall submit monthly and annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table 8. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Continuous	Permit effective date	All	Submit with monthly SMR
Daily	Permit effective date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.	Submit with monthly SMR
Weekly	Sunday following permit effective date or on permit effective date if on a Sunday	Sunday through Saturday	Submit with monthly SMR
Monthly	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	1 st day of calendar month through last day of calendar month	By the 15 th day of the third month after the month of sampling
Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	June 15 September 15 December 15 March 15
Semiannually	Closest of January 1 or July 1 following (or on) permit effective date	January 1 through June 30 July 1 through December 31	September 15 March 15
Annually	January 1 following (or on) permit effective date	January 1 through December 31	April 15

4. Reporting Protocols. The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The *estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the

- reported result. Numerical estimates of data quality may be percent accuracy (\pm a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
 - d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.
5. The Discharger shall submit SMRs in accordance with the following requirements:
- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
 - c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below: (Reference the reports to Compliance File No. YYYY to facilitate routing to the appropriate staff and file.)

California Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013
Attention: Information Technology Unit

C. Discharge Monitoring Reports (DMRs)

1. As described in Section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.

2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharge shall submit the original DMR and one copy of the DMR to the address listed below:

STANDARD MAIL	FEDEX/UPS/ OTHER PRIVATE CARRIERS
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15 th Floor Sacramento, CA 95814

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated will not be accepted unless they follow the exact same format of EPA Form 3320-1.

D. Other Reports

1. Annual Summary Report

By April 15 of each year, the Discharger shall submit an annual report containing a discussion of the previous year's influent/effluent analytical results and receiving water bacterial monitoring data. The annual report shall contain graphical and tabular summaries of the monitoring analytical data. The annual report shall also contain an overview of any plans for upgrades to the treatment plant's collection system, the treatment processes, or the outfall system. The Discharger shall submit a hard copy annual report to the Regional Water Board in accordance with the requirements described in subsection B.5 above.

Each annual monitoring report shall contain a separate section titled "Reasonable Potential Analysis" which discusses whether or not reasonable potential was triggered for pollutants which do not have a final effluent limitation in the NPDES permit. This section shall contain the following statement: "The analytical results for this sampling period did/ did not trigger reasonable potential." If reasonable potential was triggered, then the following information should also be provided:

- a. A list of the pollutant(s) that triggered reasonable potential;
- b. The Basin Plan or CTR criteria that was exceeded for each given pollutant;
- c. The concentration of the pollutant(s);
- d. The test method used to analyze the sample; and,
- e. The date and time of sample collection.

2. The Discharger shall submit to the Regional Water Board, together with the first monitoring report required by this permit, a list of all chemicals and proprietary additives which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.
3. The Regional Board requires the Discharger to file with the Regional Board, within 90 days after the effective date of this Order, a technical report on his preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:
 - a. Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks, and pipes should be considered.
 - b. Evaluate the effectiveness of present facilities and procedures and state when they become operational.
 - c. Describe facilities and procedures needed for effective preventive and contingency plans.
 - d. Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to this Discharger.

I. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table 1. Facility Information

WDID	
Discharger	Newhall Ranch Sanitation District
Name of Facility	Newhall Ranch Water Reclamation Plant
Facility Address	Hwy 126 at Los Angeles/Ventura County Line
	Newhall, California, 91355
	Los Angeles County
Facility Contact, Title and Phone	Steve Sheridan, Principal Engineer (626) 458-7151
Authorized Person to Sign and Submit Reports	Steve Sheridan, Principal Engineer (626) 458-7151
Mailing Address	900 South Fremont, Alhambra, CA 91803
Billing Address	900 South Fremont, Alhambra, CA 91803
Type of Facility	POTW
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	N
Reclamation Requirements	Future producer, applied for new water recycling requirements under separate Order
Facility Permitted Flow	2 million gallons per day (MGD)
Facility Design Flow	2 MGD
Watershed	Santa Clara River
Receiving Water	Santa Clara River
Receiving Water Type	Inland surface water

A. Ownership.

Newhall Land and Farming Company (Newhall Land) is planning on transferring ownership of the land to Newhall Ranch Sanitation District (Newhall Ranch SD) in September 2007. Newhall Ranch SD will make a formal application to the existing twenty-four County Sanitation Districts to become signatory to the amended Joint Administration Agreement (JAA), dated July 1, 1980, of the County Sanitation Districts of Los Angeles County. Newhall Ranch SD will also make a formal application to the Santa Clarita Valley Sanitation District to enter into an agreement regarding the ownership and operation of the Newhall Ranch WRP. These agreements will allow the County Sanitation Districts of Los Angeles County to be the operator of the Newhall Ranch WRP, and to provide engineering and administrative staff at the Newhall Ranch WRP. However, the Los Angeles County Department of Public Works will staff the Newhall Ranch SD until such time as Newhall Ranch SD joins the JAA. Newhall Ranch SD will retain ownership of the Newhall Ranch WRP.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. Proposed Discharge.

The Discharger proposes to discharge tertiary-treated wastewater to the Santa Clara River, a water of the United States. The Newhall Ranch Water Reclamation Plant will be a new discharger and is currently not regulated by any other Order. Although Newhall Land has obtained coverage under the General Order No. R4-2003-0111, National Pollutant Discharge Elimination System (NPDES) permit No. CAG994004, to discharge groundwater associated with dewatering and construction activities. Discharge of tertiary-treated effluent, as proposed in the Report of Waste Discharge (ROWD), should commence several months after the effective date of this NPDES Order.

C. ROWD.

The Discharger filed a report of waste discharge and submitted an application for new Waste Discharge Requirements (WDRs) and NPDES permit on April 23, 2004, years in advance of the anticipated discharge date and prior to the formation of the new Newhall Ranch Sanitation District. Supplemental information, including the analytical results of receiving water sampling, was submitted between September 27, 2004 and March 30, 2007. The required signatory requirements for the ROWD were received on May 4, 2007 and May 23, 2007. A site visit was conducted on May 23, 2007, to observe the site where the new POTW would be constructed.

II. FACILITY DESCRIPTION

A. Description of Wastewater and Biosolids Treatment or Controls

Treatment at the Newhall Ranch WRP, a publicly owned treatment works (POTW), will consist of screening, activated sludge secondary treatment with membrane bioreactors, nitrification/denitrification, ultraviolet disinfection, and partial reverse osmosis. There will

be no solids handling facilities in the near term. Waste activated sludge will be hauled away to the Valencia Water Reclamation Plant for further treatment and disposal. Brine from the RO system will be disposed of through deep well injection, under a separate USEPA permit. Treated wastewater will be discharged from Discharge Point 001 (see Table on Cover Page) to the Santa Clara River, a water of the United States, tributary to the Santa Clara River Estuary, within the Santa Clara River Watershed.

B. Discharge Points and Receiving Waters

The Newhall Ranch WRP will discharge tertiary-treated wastewater to an unlined section of the Santa Clara River, a water of the United States, through Discharge Serial No. 001 (Latitude 34° 0.403166'N, Longitude 118° 0.6896667'W), within the Santa Clara River Watershed. The Newhall Ranch WRP will be located downstream of the Los Angeles County Sanitation District's Saugus and Valencia WRPs. It will have an initial design capacity of 2 MGD, and incrementally increase its design capacity to 6.8 MGD [2.0 MGD in Phase I; 4.0 MGD in Phase II; and 6.8 MGD in Phase III], to accommodate the sewage generated by new inhabitants, as additional tracts of the Landmark Village development project are completed.

The Santa Clara River is one of the largest river systems in southern California. The River originates in the northern slope of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, and flows into the Pacific Ocean, halfway between the cities of San Buenaventura and Oxnard.

Extensive patches of riparian habitat are present along the length of the River and its tributaries. The endangered fish, the unarmored stickleback, is resident in the river. One of the largest of the Santa Clara River's tributaries, Sespe Creek, is designated as a wild trout stream by the state of California and supports significant spawning and rearing habitat. The Sespe Creek is also designated a wild and scenic river. Piru and Santa Paula Creeks, which are tributaries to the Santa Clara River, support habitat for steelhead. In addition, the river serves as an important wildlife corridor. A lagoon exists at the mouth of the river and supports a large variety of wildlife.

C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

Not applicable. Newhall Ranch WRP does not have any existing requirements.

Table 2. Historic Effluent Limitations and Monitoring Data

Parameter	Units	Effluent Limitation			Monitoring Data (From <Date> – To <Date>)		
		Average Monthly	Average Weekly	Maximum Daily	Highest Average Monthly Discharge	Highest Average Weekly Discharge	Highest Daily Discharge

D. Compliance Summary

Not applicable. Newhall Ranch WRP does not have any existing requirements.

E. Planned Changes

The Newhall Ranch WRP would have an initial design capacity of 2 MGD, and incrementally increase its design capacity to 6.8 MGD [2.0 MGD in Phase I; 4.0 MGD in Phase II; and 6.8 MGD in Phase III], to accommodate the sewage generated by new inhabitants, as additional tracts of the Landmark Village development project are completed.

- In January 2008 grading activities are scheduled to begin.
- In June 2008 Newhall Ranch SD is scheduled to approve the plans for the plant design.
- In September 2008, construction of the Newhall Ranch WRP is scheduled to begin.
- By August 2009, the Newhall Ranch WRP (2 MGD capacity) should be constructed. Pending the outcome of TMDL-based studies being conducted in the Santa Clara River Watershed, the plant may be modified in the future to provide reverse osmosis treatment to a portion of the treated effluent, in an effort to reduce the chloride concentrations discharged.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

The discharger is not a new source, as defined in the CWA. (See 40 CFR part 122.2.) Therefore, the approval of this permit is not subject to the California Environmental Quality Act (CEQA), as stated in section 13389 of the CWC.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (hereinafter Basin Plan) on June 13, 1994 that designates beneficial uses, establishes water quality objectives, and contains

implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic water supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to the Santa Clara River are as follows:

Table 3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
001	Santa Clara River (Hydro Unit 403.51)	<u>Existing:</u> Industrial Service Supply (IND); Industrial Process Supply (PROC); Agricultural Supply (AGR); Ground Water Recharge (GWR); Freshwater Replenishment (FRSH); Water Contact Recreation (REC-1); Non-contact Water Recreation (REC-2); Warm Freshwater Habitat (WARM); Wildlife Habitat (WILD); preservation or rare, threatened or endangered species (RARE); and, Wetland Habitat (WET). <u>Potential*:</u> Municipal and domestic water supply (MUN).
	Santa Clara River (Hydro Unit 403.41)	<u>Existing:</u> IND; PROC; AGR; GWR; FRSH; REC-1; REC-2; WARM; WILD; RARE; Migration of Aquatic Organisms (MIGR) and, WET. <u>Potential*:</u> MUN
	Santa Clara River (Hydro Unit 403.31)	<u>Existing:</u> IND; PROC; AGR; GWR; FRSH; REC-1; REC-2; WARM; WILD; RARE; MIGR and, WET. <u>Potential*:</u> MUN
	Santa Clara River (Hydro Unit 403.21)	<u>Existing:</u> IND; PROC; AGR; GWR; FRSH; REC-1; REC-2; WARM; WILD; RARE; MIGR and, WET. <u>Potential*:</u> MUN.
	Santa Clara River (Hydro Unit 403.11)	<u>Existing:</u> IND; PROC; AGR; GWR; FRSH; REC-1; REC-2; WARM; Cold Water Habitat (COLD); WILD; RARE; MIGR and, WET. <u>Potential*:</u> MUN.
	Santa Clara River Estuary (Hydro Unit 403.11)	<u>Existing:</u> Navigation (NAV); REC-1; REC-2; Commercial and Sport Fishing (COMM); Estuarine Habitat (EST); Marine Habitat (MAR); WILD; RARE; MIGR; Spawning, Reproduction, and/or Early Development (SPWN); and, WET.

Requirements of this Order implement the Basin Plan and subsequent amendments.

- 2. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- 3. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- 4. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 C.F.R. § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- 5. Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- 6. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations¹ section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require

¹ All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.
Attachment F – Fact Sheet (Adopted Version September 6, 2007)

that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. Since this is a new discharge, all effluent limitations and requirements contained in this Order are new. Therefore, there is no relaxation of effluent limitations. The WDR is consistent with the anti-backsliding requirements of the CWA and federal regulations.

D. Impaired Water Bodies on CWA 303(d) List

On November 30, 2006, USEPA approved the State's 2004-2006 303(d) list of impaired waterbodies. The list (hereinafter referred to as the 303(d) list) was prepared in accordance with section 303(d) of the Federal Clean Water Act to identify specific impaired waterbodies where water quality standards are not expected to be met after the implementation of technology-based effluent limitations on point sources.

Santa Clara River, Santa Clara River Estuary, and their tributaries are on the 2006 303(d) List. The following pollutants/stressors, from point and non-point sources, were identified as impacting the receiving waters:

7. Santa Clara River Estuary: Chem A, and Coliform Bacteria;
8. Santa Clara River Reach 1 (Estuary to Hwy 101 Bridge): Toxicity;
9. Santa Clara River Reach 3 (Freeman Diversion to A Street): Total Dissolved Solids;
10. Santa Clara River Reach 5 [formerly Reach 7 in 2002 303d list] (Blue Cut to West Pier Hwy 99 Bridge): Coliform Bacteria;
11. Santa Clara River Reach 6 [formerly Reach 8 in 2002 303d list] (W. Pier Hwy 99 to Bouquet Canyon Rd. Bridge) -- Hydrologic Unit 403.51: Chlorpyrifos, Coliform Bacteria, Diazinon, and Toxicity; and,
12. Santa Clara River Reach 7 [formerly Reach 9 in 2002 303d list] (Bouquet Canyon Rd to above Lang Gaging) -- Hydrologic Unit 403.51: Coliform Bacteria.

E. Other Plans, Policies and Regulations

1. **Sources of Drinking Water Policy.** On May 19, 1988, the State Water Board adopted Resolution No. 88-63, *Sources of Drinking Water (SODW) Policy*, which established a policy that all surface and ground waters, with limited exemptions, are suitable or potentially suitable for municipal and domestic supply. To be consistent with State Water Board's SODW policy, on March 27, 1989, the Regional Water Board adopted Resolution No. 89-03, *Incorporation of Sources of Drinking Water Policy into the Water Quality Control Plans (Basin Plans)– Santa Clara River Basin (4A)/ Los Angeles River Basin (4B)*.

Consistent with Regional Water Board Resolution No. 89-03 and State Water Board Resolution No. 88-63, in 1994 the Regional Water Board conditionally designated all inland surface waters in Table 2-1 of the 1994 Basin Plan as existing, intermittent, or potential for Municipal and Domestic Supply (MUN). However, the conditional designation in the 1994 Basin Plan included the following implementation provision: "no new effluent limitations will be placed in Waste Discharge Requirements as a result of these [potential MUN designations made pursuant to the SODW policy and the Regional Water Board's enabling resolution] until the Regional Water Board adopts [a special Basin Plan Amendment that incorporates a detailed review of the waters in the Region that should be exempted from the potential MUN designations arising from SODW policy and the Regional Water Board's enabling resolution]." On February 15, 2002, the USEPA clarified its partial approval (May 26, 2000) of the 1994 Basin Plan amendments and acknowledged that the conditional designations do not currently have a legal effect, do not reflect new water quality standards subject to USEPA review, and do not support new effluent limitations based on the conditional designations stemming from the SODW Policy until a subsequent review by the Regional Water Board finalizes the designations for these waters. This permit is designed to be consistent with the existing Basin Plan.

2. **Secondary Treatment Regulations.** Section 133 of 40 CFR establishes the minimum levels of effluent quality to be achieved by secondary treatment. These limitations, established by USEPA, are incorporated into this Order, except where more stringent limitations are required by other applicable plans, policies, or regulations.
3. **Storm Water.** CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR, Section 122.26 that established requirements for storm water discharges under an NPDES program. To facilitate compliance with federal regulations, on November 1991, the State Water Board issued a statewide general permit, *General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities*. This permit was amended in September 1992 and reissued on April 17, 1997 in State Water Board Order No. 97-03-DWQ to regulate storm water discharges associated with industrial activity.

General NPDES permit No. CAS000001 is applicable to storm water discharges from the Newhall Ranch WRP's premises. Newhall Ranch SD will file a Notice of Intent to comply with the requirements of the general permit. Newhall Ranch SD will develop and implement a Storm Water Pollution Prevention Plan (SWPPP), to comply with the State Water Board's (Order No. 97-03-DWQ). Newhall Ranch SD will capture and treat a percentage of the first flush runoff that falls on the Newhall Ranch WRP.

4. **Sanitary Sewer Overflows.** The Clean Water Act prohibits the discharge of pollutants from point sources to surface waters of the United States unless authorized under an NPDES permit. (33 U.S.C. §§1311, 1342). The State Water Board adopted Statewide General Waste Discharge Requirements (WDRs) for

Sanitary Sewer Systems, Water Quality Order No. 2006-0003 on May 2, 2006, to provide a consistent, statewide regulatory framework to address Sanitary Sewer Overflows (SSOs). The WDR requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all SSOs to the State Water Board's online SSO database.

The requirements contained in this Order in Sections VI.C.3.b, VI.C.4, and VI.C.5.c.6. are intended to be consistent with the requirements in the SSO WDR. The Regional Water Board recognizes that there are areas of overlapping interest between the NPDES permit conditions and the SSO WDR requirements. The requirements of the SSO WDR are considered the minimum thresholds (see Finding 11 of WQ Order No. 2006-0003). The Regional Water Board will accept the documentation prepared by the Permittee under the SSO WDR for compliance purposes, as satisfying the requirements in Sections VI.C.3.b, VI.C.4, and VI.C.5.c.6, provided for any more specific or stringent provisions enumerated in this Order, have also been addressed.

5. **Watershed Management** - This Regional Water Board has been implementing a Watershed Management Approach (WMA), to address water quality protection in the Los Angeles Region, as detailed in the Watershed Management Initiative (WMI). The WMI is designed to integrate various surface and ground water regulatory programs while promoting cooperative, collaborative efforts within a watershed. It is also designed to focus limited resources on key issues and use sound science. Information about the Santa Clara River Watershed and other watersheds in the region can be obtained from the Regional Water Board's web site at <http://www.swrcb.ca.gov/rwqcb4/> and clicking on the word "Watersheds".
6. **Relevant Total Maximum Daily Loads** - A Total Maximum Daily Load (TMDL) is a determination of the amount of a pollutant, from point, non-point, and natural background sources, including a margin of safety that may be discharged to a water quality-limited water body. Section 303(d) of the CWA established the TMDL process. The statutory requirements are codified at 40 CFR, Part 130.7. TMDLs must be developed for the pollutants of concern, which impact the water quality of water bodies on the 303(d) list. The Regional Water Board has developed a TMDL that assesses the extent and sources of the ammonia and algae (nutrient/nitrogen) problems in the Santa Clara River. According to the TMDL schedule, under the amended consent decree, *Heal the Bay, Santa Monica Bay Keeper, et al. v. Browner, et al.* (March 23, 1999), the nitrogen and chloride TMDLs for the Santa Clara River must be completed by 2004 and 2003, respectively. The coliform TMDL was scheduled for completion by 2006.
 - a. **Chloride TMDL.**
 - i. On October 24, 2002, the Regional Water Board adopted Resolution No. 2002-018, *Amendment to the Basin Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load to Reduce Chloride Loading in the Upper Santa Clara River*. Soon after, the Regional Water Board submitted the TMDL to the State Water Board for approval. On February 19, 2003, the

State Water Board adopted Resolution No. 2003-0014, the "Remand Resolution," finding that the Regional Water Board staff prepared the documents and followed procedures satisfying environmental documentation requirements in accordance with the California Environmental Quality Act, scientific peer review, and other State laws and regulations to develop a TMDL. However, the Remand Resolution directed the Regional Water Board to consider revising the implementation provisions of the chloride TMDL. On July 10, 2003, the Regional Water Board reconsidered Resolution No. 2002-018, in light of the Remand Resolution, and adopted Resolution No. 2003-008 which modified the chloride TMDL implementation provisions by:

- (1) Expanding the phased-TMDL approach to allow CSDLAC to complete the implementation tasks sequentially and within 13 years;
- (2) Extending the interim limits beyond the proposed two and a half years but not to exceed 13 years, so that the interim limits may remain in effect during the planning, construction, and execution portions of the TMDL's implementation tasks; and,
- (3) Modifying the TMDL analysis task list to include an assessment/evaluation of alternative water supplies for agricultural beneficial uses.

On May 6, 2004, the Regional Water Board adopted Resolution No. 2004-004, amending the Upper Santa Clara River Chloride TMDL. State Water Board, OAL, and USEPA approval occurred on July 22, 2004, November 15, 2004, and April 28, 2005, respectively. The Chloride TMDL became effective on May 4, 2005.

On August 3, 2006, the Regional Water Board adopted Resolution No. R4-2006-016, Amendment to the Water Quality Control Plan for the Los Angeles Region through revision of the Implementation Plan for the Upper Santa Clara River Chloride TMDL, which shortened the compliance schedule from thirteen to eleven years. State Water Board approved the resolution on May 22, 2007. OAL, and USEPA approval is pending.

- ii. On March 26, 2007, TMDL staff wrote a technical memo regarding the waste load allocation for chloride for Newhall Ranch WRP. The memo included the following background information and conclusions

(1) Background.

- a. The Newhall Ranch WRP, currently in the planning stages, is part of the Newhall Ranch Specific Plan which guides the long-term development of the 11963-acre Newhall Ranch Community. Based on information provided by the Newhall Ranch Company on November 22, 2006, the Newhall Ranch WRP treatment capacity will be 6.8 MGD of municipal and commercial wastewater that will be generated by the prospective Newhall Ranch community. The treated wastewater will be reclaimed for landscape irrigation during dry weather conditions. During wet weather, when irrigation demands are lower, unused reclaimed water will be

discharged to Reach 5 of the Santa Clara River. A new sanitation district will be formed to maintain and operate the Newhall Ranch WRP.

- b. The existing water quality objective (WQO) for chloride in Reaches 5 and 6 of the Santa Clara River is 100 milligrams per liter (mg/L). The most sensitive beneficial uses for chloride is agricultural supply (AGR). Because chloride levels in the Upper Santa Clara River (USCR) exceeded the water quality objective WQO, the USCR was listed on the 1998 303(d) list and a total maximum daily load (TMDL) for chloride in the USCR was adopted by the Regional Water Board. The USCR Chloride TMDL became effective on May 4, 2005, and the chloride wasteload allocation for existing major Publicly-Owned Treatment Works (POTWs) discharging to the USCR is also 100 mg/L. The TMDL found that the nonpoint sources of chloride were not significant relative to the point sources and that concentration based wasteload allocations were effective in protecting beneficial uses. The TMDL identified wastewater discharges from the Los Angeles County Sanitation Districts (Districts) Saugus and Valencia Water Reclamation Plants (WRPs) as the primary source of chloride and assigns waste load allocations (WLAs) of 100 mg/L chloride to the Districts WRPs. Other NPDES discharges contribute a minor chloride load and the chloride WLAs for these point sources is 100 mg/L.
- c. The USCR chloride WLAs are expressed on a concentration basis derived from and equivalent to the existing WQO, thereby providing direct protection of the most sensitive beneficial use, , agricultural supply (AGR). Under the TMDL Implementation Plan, a special study was conducted to confirm that the concentration-based WLA of 100 mg/L chloride is protective of AGR. That study has been completed and confirms that the concentration-based WLA of 100 mg/L is protective of salt sensitive AGR. A concentration-based WLA also accommodates future growth and provides beneficial uses protection from chloride loads that were in place at the time of the TMDL development. Protection of beneficial uses from additional chloride loads that were not assigned wasteload allocations is provided by using the WLAs as effluent limits in permits for new and future sources such as Newhall Ranch WRP.
- d. The Staff Report for the TMDL, dated August 21, 2002, states "A concentration-based target accommodates future growth by allowing increased mass as long as it is accompanied by additional flow. This analysis is based on existing discharge locations in the Upper Santa Clara River. Regional Water Board staff understands that an additional water reclamation plant is planned to accommodate future growth in the Santa Clarita Valley and that this plant will discharge only during rain events. Permitting of additional discharges may compromise the success of the TMDL without additional studies." Although the Staff Report implies that permitting of additional discharges may require

additional studies, it is a general statement that does not define the types of studies needed. Staff finds that additional studies are not needed in order to conclude that water quality will not be degraded if concentration-based wasteload allocations that are equivalent to the WQO are assigned to new facilities. If the WLAs and effluent limits for new facilities in the Upper Santa Clara River watershed are set at the end-of pipe and are equivalent to the TMDL WLA and WQO staff finds that these WLAs will not cause degradation of water quality. Studies regarding the effect of additional chloride load on groundwater basins underlying the USCR River are underway and scheduled for completion by November 2007. Initial results from these studies show that discharges at effluent limits of 100 mg/L chloride will not degrade groundwater quality. Staff finds that results from these studies may be used to revise the effluent limits for all dischargers discharging at 100 mg/L if necessary. If this occurs, the NPDES permit for Newhall Ranch WRP will be reopened.

- e. The majority of effluent from the Newhall Ranch WRP will be used for reclaimed water purposes. Discharge to the Santa Clara River (SCR) will primarily occur during periods when the effluent supply exceeds the reclaimed demand, such as during the peak wet months of the November through March. During years 1 and 2 of the WRP operation, the WRP will operate at a maximum of 2 mgd, with an estimated average discharge flow rate of 0.2 mgd during the 5 month wet period. No sooner than year 3 will the WRP be expanded to 6.8 mgd, with an approximate average discharge flowrate of 0.6 mgd during this 5 month wet period. Therefore, discharge periods will coincide with peak wet months when dilution capacity is maximal (i.e., instream flows are highest). The average November-March instream flowrate at USGS station 11109000 (Newhall Bridge, approximately 2.5 miles downstream of the County line) is 188 cfs (121 mgd) based on measured average daily flow data for water years 1977-2006. Newhall WRP effluent will represent less than 1% of this average volume. Consequently, TMDL staff finds that the proposed discharge will not add appreciable chloride loads to the surface water or underlying groundwater.

(2) Conclusion.

The Upper Santa Clara River Chloride TMDL WLAs for discharges from the Saugus and Valencia WRPs into Reach 5 and 6 of the Santa Clara River are concentration-based which protects sensitive AGR uses in the River while accommodating future growth. The TMDL does not prohibit future growth or increased loads. Use of concentration-based WLAs requires that increased chloride loads are concurrent with increased discharge flow to the USCR. The increased flow increases the capacity of the receiving water to assimilate chloride. Because the Newhall Ranch WRP will increase flow in the WRP, the discharge of the NRWRP would not contribute to further impairment of surface water in Reaches 5 and 6 of

the Santa Clara River if the chloride concentration in discharge is equal to or less than the WQO and TMDL WLA of 100 mg/L. An NPDES discharge permit with an effluent limit of 100 mg/L chloride would be consistent with the TMDL. Additional studies are not needed at this time if the effluent limit for chloride is concentration-based and set at, or is less than the WQO the of 100 mg/L.

- b. **Nitrogen Compounds TMDL.** On August 7, 2003, the Regional Water Board adopted Resolution No. 2003-11, the *Santa Clara River Nitrogen Compounds TMDL (Nitrogen Compounds TMDL)*. State Water Board, OAL, and USEPA approval occurred on November 19, 2003, February 27, 2004, and March 18, 2004, respectively. The Nitrogen Compounds TMDL became effective on March 23, 2004. Although the Nitrogen Compounds TMDL does not specify an individual WLA for the Newhall Ranch WRP, the Nitrogen Compounds TMDL staff report does discuss future growth. The staff report states that "the numeric targets for POTWs with increasing capacity or new POTWs will be set on a concentration basis...."

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

Effluent and receiving water limitations in this Board Order are based on the Federal Clean Water Act, Basin Plan, State Water Board 's plans and policies, USEPA guidance and regulations, and best practicable waste treatment technology. This order authorizes the discharge of tertiary-treated wastewater through Discharge Serial No. 001 only. It does not authorize any other types of discharges.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Technology-based effluent limits require a minimum level of treatment for industrial/municipal point sources based on currently available treatment technologies while allowing the discharger to use any available control techniques to meet the effluent limits. The 1972 CWA required POTWs to meet performance requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level--referred to as "secondary

treatment"--that all POTWs were required to meet by July 1, 1977. More specifically, Section 301(b)(1)(B) of the CWA required that EPA develop secondary treatment standards for POTWs as defined in Section 304(d)(1). Based on this statutory requirement, EPA developed national secondary treatment regulations which are specified in 40 CFR 133. These technology- based regulations apply to all POTWs and identify the minimum level of effluent quality to be attained by secondary treatment in terms of five-day biochemical oxygen demand, total suspended solids, and pH.

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at Part 133 and Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3.

2. Applicable Technology-Based Effluent Limitations

This facility is subject to the technology-based regulations for the minimum level of effluent quality attainable by secondary treatment in terms of BOD₅20°C, TSS, and pH. The following Table summarizes the technology-based effluent limitations applicable to the Facility:

Summary of Technology-based Effluent Limitations Discharge Point 001

Table 4. Summary of Technology-based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
BOD ₅ 20°C	mg/L	20	30	45	--	--
	lbs/day *	330	500	750	--	--
Total Suspended solids (TSS)	mg/L	15	40	45	--	--
	lbs/day	250	670	750	--	--
pH	standard units	--	--	--	6.5	8.5
Removal Efficiency for BOD and TSS	%	85	--	--	--	--

- * The mass emission rates are based on the plant design flow rate of 2.0 mgd, and are calculated as follows: $\text{Flow (MGD)} \times \text{Concentration (mg/L)} \times 8.34 \text{ (conversion factor)} = \text{lbs/day}$. However, the design capacity will incrementally increase to 6.8 MGD, as the phased plant upgrades approach completion. The mass-based effluent limitation will accordingly be modified following an Anti-degradation analysis demonstration conducted by the Discharger, and upon certification and approval of increased treatment plant capacity. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

However, this facility is also subject to technology-based effluent limitations contained in similar NPDES permits, for similar facilities, based on the treatment level achievable by tertiary-treated wastewater treatment systems. These effluent limitations are consistent with the State Water Board precedential decision, State Water Board Order No. WQ 2004-0010 for the City of Woodland. Further, mass-based effluent limitations are based on a design flow rate of 2.0 MGD for Phase I, and ultimately on a 6.8 MGD flow rate for Phase III.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. This Order contains requirements, expressed as a technology equivalence requirement, more stringent than secondary treatment requirements that are necessary to meet applicable water quality standards. The rationale for these requirements, which consist of tertiary treatment or equivalent requirements or other provisions, is discussed starting from Section IV.C.2.b.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR. Table R1 contains the RP analysis.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

- a. The Basin Plan establishes the beneficial uses for surface water bodies in the Los Angeles region. The beneficial uses of the Santa Clara River affected by the

discharge have been described previously in this Fact Sheet and in the WDR findings.

- b. The Basin Plan also specifies narrative and numeric water quality objectives applicable to surface water as shown in the following discussions.
 - i. Table 5 summarizes the applicable water quality criteria/objective for priority pollutants reported in detectable concentrations in the effluent or receiving water. These criteria were used in conducting the Reasonable Potential Analysis for this Order.

ii. **Biochemical Oxygen Demand (BOD) and Suspended solids**

Biochemical oxygen demand (BOD) is a measure of the quantity of the organic matter in the water and, therefore, the water's potential for becoming depleted in dissolved oxygen. As organic degradation takes place, bacteria and other decomposers use the oxygen in the water for respiration.

Unless there is a steady resupply of oxygen to the system, the water will quickly become depleted of oxygen. Adequate dissolved oxygen levels are required to support aquatic life. Depressions of dissolved oxygen can lead to anaerobic conditions resulting in odors, or, in extreme cases, in fish kills.

40 CFR, Part 133 describes the minimum level of effluent quality attainable by secondary treatment, for BOD and suspended solids, as:

- a. the monthly average shall not exceed 30 mg/L; and,
- b. the 7-day average shall not exceed 45 mg/L.

The Newhall Ranch WRP will provide tertiary treatment, as such, the limits in the permit are more stringent than secondary treatment requirements. The Plant will achieve solids removal rates that are better than secondary-treated wastewater by adding a polymer/coagulant to enhance the precipitation of solids, and by filtering the effluent.

In addition to having mass-based and concentration-based effluent limitations for BOD and suspended solids, the Newhall Ranch WRP also has a percent removal requirement for these two constituents. In accordance with 40 CFR, Sections 133.102(a)(3) and 133.102(b)(3), the 30-day average percent removal shall not be less than 85 percent. Percent removal is defined as a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

iii. pH

The hydrogen ion activity of water (pH) is measured on a logarithmic scale, ranging from 0 to 14. While the pH of "pure" water at 25°C is 7.0, the pH of natural waters is usually slightly basic due to the solubility of carbon dioxide from the atmosphere. Minor changes from natural conditions can harm aquatic life. The effluent limitation for pH which reads, "the wastes discharged shall at all times be within the range of 6.5 to 8.5," is taken from the Basin Plan (page 3-15) which reads "the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge."

iv. Settleable solids

Excessive deposition of sediments can destroy spawning habitat, blanket benthic (bottom dwelling) organisms, and abrade the gills of larval fish. The limits for settleable solids are based on the Basin Plan (page 3-16) narrative, "Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses." The numeric limits are empirically based on results obtained from the settleable solids 1-hour test, using an Imhoff cone.

It is impracticable to use a 7-day average limitation, because short term spikes of settleable solid levels that would be permissible under a 7-day average scheme would not be adequately protective of all beneficial uses.

v. Oil and Grease

Oil and grease are not readily soluble in water and form a film on the water surface. Oily films can coat birds and aquatic organisms, impacting respiration and thermal regulation, and causing death. Oil and grease can also cause nuisance conditions (odors and taste), are aesthetically unpleasant, and can restrict a wide variety of beneficial uses. The limits for oil and grease are based on the Basin Plan (page 3-11) narrative, "Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses."

The numeric limits are empirically based on concentrations at which an oily sheen becomes visible in water. It is impracticable to use a 7-day average limitation, because spikes that occur under a 7-day average scheme could cause visible oil sheen. A 7-day average scheme would not be sufficiently protective of beneficial uses.

vi. Residual chlorine

Disinfection of wastewaters with chlorine produces chlorine residual. Chlorine and its reaction products are toxic to aquatic life. The limit for residual chlorine is based on the Basin Plan (page 3-9) narrative, "Chlorine residual shall not be present in surface water discharges at concentrations that exceed 0.1 mg/L and shall not persist in receiving waters at any concentration that causes impairment of beneficial uses."

It is impracticable to use a 7-day average or a 30-day average limitation, because it is not as protective as of beneficial uses as a daily maximum limitation is. Chlorine is very toxic to aquatic life and short-term exposures of chlorine may cause fish kills.

Although the Newhall Ranch WRP proposes to use UV light as its primary means of disinfection, similar facilities have had to use small concentrations of residual chlorine to supplement UV disinfection, in order to kill certain virus present in wastewater or for maintenance purposes to clean the UV lamps. The facility has reasonable potential for residual chlorine because it proposes to use sodium hypochlorite to clean and wash the UV lamps. In addition, all potable water has traces of residual chlorine. In addition, the facility may choose to add residual chlorine to their effluent at a later date, similar to what other POTWs with UV have done.

vii. Total Dissolved Solids, Chloride, Sulfate, and Boron

The limits for total dissolved solids, sulfate, chloride, and boron are based on Basin Plan Table 3-8 (page 3-12), for the Santa Clara River watershed (between West Pier Highway 99 and Blue Cut Gauging Station). TDS = 1000 mg/L; Sulfate = 400 mg/L; Chloride = 100 mg/L; and Boron = 1.5 mg/L. It is practicable to express these limits as monthly averages, since they are not expected to cause acute effects on beneficial uses. These limits will protect waters of the US and prevent degradation.

viii. Methylene Blue Activated Substances (MBAS)

The MBAS procedure tests for the presence of anionic surfactants (detergents) in surface and ground waters. Surfactants disturb the water surface tension, which affects insects and can affect gills in aquatic life. The MBAS can also impart an unpleasant soapy taste to water, as well as cause scum and foaming in waters, which impact the aesthetic quality of both surface and ground waters.

Given the nature of the facility (a POTW) which accepts domestic wastewater into the sewer system and treatment plant, and the characteristics of the wastes discharged, the discharge has reasonable potential to exceed both the numeric MBAS water quality objective (WQO) and the narrative WQO for prohibition of floating material such as foams and scums. Therefore an effluent limitation is required.

The Discharger has collected receiving water samples and has reported detectable quantities of MBAS concentrations in the Santa Clara River in the vicinity of the proposed discharge. The discharge from the Newhall Ranch WRP may have reasonable potential to contribute to an exceedance of the 0.5 mg/L WQO. The 0.5 mg/L concentration (which has been determined to be protective of beneficial uses and the aesthetic quality of waters), is based on the Department of Health Services' secondary drinking water standard, and on the Basin Plan WQO (p.3-11) which reads, "Waters shall not have MBAS concentrations greater than 0.5 mg/L in waters designated MUN." While the wastewater from this POTW is not directly discharged into a MUN designated surface water body, it will percolate into unlined reaches of the Santa Clara River [via ground water recharge designated beneficial use (GWR)] to ground water designated for MUN beneficial use. In addition, the Basin Plan states that "Ground water shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses." Therefore, the secondary MCL should be the MBAS limit for this discharge to protect ground water recharge and the MUN use of the underlying ground water, while also protecting surface waters from exhibiting scum or foaming.

Since the Basin Plan objective is based on a secondary drinking water standard, it is practicable to have a monthly average limitation in the permit, rather than a daily maximum.

ix. Total Inorganic Nitrogen

Total inorganic nitrogen is the sum of Nitrate-nitrogen and Nitrite-nitrogen. High nitrate levels in drinking water can cause health problems in humans. Infants are particularly sensitive and can develop methemoglobinemia (blue-baby syndrome). Nitrogen is also considered a nutrient. Excessive amounts of nutrients can lead to other water quality impairments, ex. algae.

- (1) **Concentration-based Limit** - The effluent limit for total inorganic nitrogen ($\text{NO}_2\text{-N} + \text{NO}_3\text{-N}$) of 5 mg/L is based on Basin Plan Table 3-8 (page 3-12), for the Santa Clara River watershed (between West Pier Highway 99 and Blue Cut Gaging Station).

- (2) **Mass-based Limit** - The mass bases limits are based on the Phase I initial plant design flow rate of 2.0 mgd, and are calculated as follows: $\text{Flow(MDG)} \times \text{Concentration (mg/L)} \times 8.34 \text{ (conversion factor)} = \text{lbs/day}$. However, the design capacity will incrementally increase to 6.8 MGD, as the phased plant expansion approaches completion. The mass-based effluent limitation will accordingly be modified upon certification and approval of increased treatment plant capacity. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

x. **Nitrite as Nitrogen**

Chapter 3 of the Basin Plan (page 3-11) contains the following water quality objective, "Waters shall not exceed the 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen ($\text{NO}_3\text{-N} + \text{NO}_2\text{-N}$), 45 mg/L as nitrate (NO_3), 10 mg/L as nitrate-nitrogen ($\text{NO}_3\text{-N}$), or 1 mg/L as nitrite-nitrogen ($\text{NO}_2\text{-N}$) or as otherwise designated in Table 3-8."

However, the TMDL for Nitrogen Compounds in the Santa Clara River (*Nitrogen Compounds TMDL*), Resolution No. 2003-011, adopted by the Regional Water Board on August 7, 2003, contains a 0.9 mg/L concentration-based WLA for POTWs in the Santa Clara River Watershed. The 0.9 mg/L WLA is based upon the Basin Plan WQO, with a 10% margin of safety. The TMDL supercedes the generic Basin Plan WQO. Given the nature of the facility, the Discharger has reasonable potential to cause or contribute to an exceedance based on best professional judgment, and therefore needs a limit for Nitrite-N. The 0.9 mg/L limit will have to be met at the end-of-pipe, because dilution is not an option at the present time.

xi. **Ammonia Nitrogen**

Ammonia is a pollutant routinely found in the wastewater effluent of Publicly Owned Treatment Works (POTWs), in landfill-leachate, as well as in run-off from agricultural fields where commercial fertilizers and animal manure are applied. Ammonia exists in two forms – un-ionized ammonia (NH_3) and the ammonium ion (NH_4^+). They are both toxic, but the neutral, un-ionized ammonia species (NH_3) is much more toxic, because it is able to diffuse across the epithelial membranes of aquatic organisms much more readily than the charged ammonium ion. The form of ammonia is primarily a function of pH, but it is also affected by temperature and other factors. Additional impacts can also occur as the oxidation of ammonia lowers the dissolved oxygen content of the water, further stressing aquatic organisms. Oxidation of ammonia to nitrate may lead to groundwater impacts in areas of recharge. [There is groundwater recharge in these reaches]. Ammonia also combines

with chlorine (often both are present in POTW treated effluent discharges) to form chloramines – persistent toxic compounds that extend the effects of ammonia and chlorine downstream.

Ammonia was 303(d) listed in Reach 3 of the Santa Clara River, downstream of the discharge, in the 2002 303(d) list. Due to the nature of the facility, ammonia has reasonable potential to cause or contribute to an excursion of a water quality objective. Therefore, a water quality-based effluent limitation for total ammonia is required in order to be protective of the water quality objective.

The 1994 Basin Plan contained water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Water Board, with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use designations for protection of Aquatic Life*. This Resolution also modified the Basin Plan to include an implementation provision which specifies the procedure for translating the ammonia WQO into final effluent limitations. Resolution No. 2002-011 was approved by the State Water Board, the Office of Administrative Law, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively.

On August 7, 2003, the Regional Water Board adopted Resolution No. 2003-011, *Amendment to the Basin Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds in the Santa Clara River (Nitrogen Compounds TMDL)*. The TMDL does not contain an ammonia nitrogen Waste Load Allocations (WLA) for the Newhall Ranch WRP. However, the TMDL staff report contains the following statement: "The numeric targets for POTWs with increasing capacity or new POTWs will be set on a concentration basis...". The final effluent limitations for ammonia prescribed in this Order are based on the Nitrogen Compounds TMDL numeric target for TMDL-Reach 7 at the County Line, and apply at the end of pipe.

On December 1, 2005, the Regional Water Board adopted Resolution No. 2005-014, *Amendment to the Water Quality Control Plan for the Los Angeles Region Revise the Early Life Stage Implementation Provision of the Freshwater Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) for Protection of Aquatic Life*. Resolution No. 2005-014 was approved by the State Water Board, the Office of Administrative Law, and USEPA on July 19, 2006, August 31, 2006, and April 5, 2007, respectively. This amendment contains ammonia objectives to protect Early Life Stages (ELS) of fish in inland surface water supporting aquatic life. It revised the implementation provision included as part of the

freshwater ammonia objectives relative to the protection of ELS of fish in inland surface waters. ELS of fish has been determined to be present in the Santa Clara River, because the receiving water is not included in the list of waterbodies where ELS is absent.

The limitations for ammonia prescribed in this Order are based on the ammonia criteria as revised by Resolution 2002-011 and Resolution No. R4-2005-014. Consistent with methods used to develop ammonia waste load allocation for TMDLs in the Los Angeles region (such as the Los Angeles River Nutrient TMDL and the Malibu Creek Nutrient TMDL), the 50th percentile of receiving water pH and temperature data (7.8 pH units and 15.6°C, respectively), as measured at what would be the immediate downstream receiving water location, were used to calculate the monthly average ammonia limitation that resulted to 1.93 mg-N/L. The 90th percentile of pH data (8.4 pH units), as measured at what would be the immediate downstream receiving water location, was used to calculate the daily maximum ammonia effluent limitation that resulted to 3.87 mg-N/L.

Use of 50th percentile receiving water data to set monthly average limitations and 90th percentile data to set daily maximum limitations is protective of downstream receiving water bodies. Although there are no available ammonia effluent data points with which to determine seasonal or other long-term trends, for this newly proposed POTW, based on other POTWs with NDN systems ammonia concentrations are expected to fluctuate around the 50th percentile value over the course of a month. Use of a 50th percentile value is more representative of average conditions in the receiving water body than one or only a few grab samples taken over the course of a month. Note that half the time the limit would be expected to be overly protective. Use of a 90th percentile value to set a daily maximum limit is also protective. Ninety percent of the time the limit will be overly protective, and the limit will only be under protective ten percent of the time.

Table 3, Basin Plan Beneficial Uses of this Fact Sheet summarizes the applicable beneficial uses for the receiving water body. This Table indicates that Santa Clara River does not have a "COLD" or "MIGR" beneficial use designation.

a. One-Hour Average Objective (Maximum Daily Effluent Limit, MDEL)

The Facility discharges into a receiving waterbody that does not have a "COLD" or "MIGR" beneficial use designation. It is assumed that salmonids may be absent. The one-hour average objective is dependent upon pH and the presence of coldwater fish species, such as salmonids, but it is independent of temperature.

For freshwater, the one-hour average concentration of total ammonia as nitrogen (in mg N/L) shall not exceed the values in Table 3-1 (amended on April 25, 2002) of the Basin Plan or as described in the equation below:

$$\text{One-hour Average Concentration} = \frac{0.275}{1 + 10^{7.204 - \text{pH}}} + \frac{39.0}{1 + 10^{\text{pH} - 7.204}}$$

The 90th percentile of pH is 8.4, measured at the immediate downstream receiving water (Station R-A). Using the pH value of 8.4 in the formula above, the resulting MDEL is equal to 3.87 mg/L.

b. 30-Day Average Objective (Average Monthly Effluent Limit, AMEL)

Early life stage of fish is presumptively present and must be protected at all times of the year unless the water body is listed in Table 3-X of the Basin Plan (in Resolution No. 2005-014) or unless a site-specific study is conducted, which justifies applying the ELS absent condition or a seasonal ELS present condition. The Santa Clara River is not included in Table 3-X. Therefore, the above-mentioned receiving waters are considered "ELS Present". For freshwaters subject to the "Early Life Stage Present" condition, the thirty-day average concentration of total ammonia as nitrogen (in mg N/L) shall not exceed the values in Table 3-2 of the Basin Plan or as described in the equation below:

$$\text{30-day Average Concentration} = \left(\frac{0.0577}{1 + 10^{7.688 - \text{pH}}} + \frac{2.487}{1 + 10^{\text{pH} - 7.688}} \right) * \text{MIN}(2.85, 1.45 * 10^{0.028 * (25 - (T))})$$

Where T = temperature expressed in °C.

The 30-day average objective¹ is dependent on pH, temperature, and the presence or absence of early life stages of fish. The 50th percentile of pH and temperature at the immediate downstream receiving water is 7.8 pH and 15.6°C, respectively. Using the Discharger's monitoring data in the formula above, the resulting AMEL is equal to 1.93 mg/L.

¹ This is the current Basin Plan definition of the 30-day average objective, according to the Ammonia Basin Plan Amendment, Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use designations for protection of "Aquatic Life,"* adopted by the Los Angeles Regional Water Quality Control Board on April 25, 2002. It was amended by Resolution No. 2005-014, adopted by the Regional Board on December 1, 2005 and was approved by the USEPA on April 5, 2007. This new Resolution implements ELS Provision as described under "implementation", subparagraph 3. In this Resolution, the Discharger's receiving waterbody is designated as ELS absent.

c. Site Specific Objective (SSO)

On June 7, 2007, the Regional Water Board adopted Amendments to the Water Quality Control Plan-Los Angeles Region-To Incorporate Site-Specific Objectives for Select Inland Surface Waters in the San Gabriel River, Los Angeles River, and Santa Clara River Watersheds. This amendment to the Basin Plan will incorporate site-specific 30-day average objectives for ammonia along with corresponding site-specific early life stage implementation provisions for select waterbody reaches and tributaries in Santa Clara, Los Angeles, and San Gabriel River watersheds. Once the amendment is approved by USEPA, this permit will be opened to incorporate the SSO-derived 30-day objective. The application of the SSO is not considered backsliding under Exemption (2) of Section 402(0)(2) of the Clean Water Act and 40 CFR 122.44. At this time any calculation of SSO derived effluent limitations will not be included in this permit. However, the ammonia chronic SSO will not impact the final effluent limits for ammonia, because it is the acute ammonia criteria that drives the more stringent ammonia final effluent limits. The dischargers may wish to embark on a SSO study that would lead to a Basin Plan amendment to modify the acute ammonia criteria. This permit contains a reopener which would allow the Regional Water Board to open up the permit and insert applicable new provisions resulting from future TMDLs or other Basin Plan Amendments, such as a new SSO.

This permit includes final effluent ammonia-nitrogen effluent limitations based on receiving water pH and temperature, because there is no effluent pH and temperature available at this time. Conditions in the effluent may be significantly different than the receiving water conditions. The Basin Plan's water quality objective for ammonia shall be met at the receiving water at all times. In this permit, the Discharger has to meet the ammonia water quality objective within the first 100 feet downstream of the discharge outfall. In order to determine the variability and changing conditions in the receiving water, additional receiving water monitoring and compliance determinations will be required in addition to the effluent limits, to ensure that ammonia water quality objectives are met in the receiving water at all times.

This permit requires the Discharger to submit an approvable workplan to determine the pH and temperature fluctuations in the first 100 feet downstream of the discharge outfall. This workplan shall be submitted to this Regional Water Board for approval by the Executive Officer within 60 days from the date of adoption of this permit.

xii. Coliform Bacteria

Total and fecal coliform bacteria are used to indicate the likelihood of pathogenic bacteria in surface waters. Given the nature of the facility, a

wastewater treatment plant, pathogens are likely to be present in the effluent in cases where the disinfection process is not operating adequately. As such, the permit contains the following:

i. Effluent Limitations:

- The 7 day median number of coliform organisms at some point in the treatment process must not exceed a Most Probable Number (MPN) or Colony Forming Unit (CFU) of 2.2 per 100 milliliters, and
- The number of coliform organisms must not exceed an MPN or CFU of 23 per 100 milliliters in more than one sample within any 30-day period.

These disinfection-based effluent limitations for coliform are for human health protection and are consistent with requirements established by the Department of Health Services. These limits for coliform must be met at the point of the treatment train immediately following disinfection, as a measure of the effectiveness of the disinfection process.

ii. Receiving Water Limitation

- Geometric Mean Limits
 - * E.coli density shall not exceed 126/100 mL.
 - * Fecal coliform density shall not exceed 200/100 mL.
- Single Sample Limits
 - * E.coli density shall not exceed 235/100 mL.
 - * Fecal coliform density shall not exceed 400/100 mL.

These receiving water limitations are based on Resolution No. 01-018, Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Bacteria Objectives for Water Bodies Designated for Water Contact Recreation, adopted by the Regional Water Board on October 25, 2001. The Resolution was approved by State Water Board, OAL, and USEPA, on July 18, 2002, September 19, 2002, and September 25, 2002, respectively.

xiii. Temperature

USEPA document, *Quality Criteria for Water 1986* [EPA 440/5-86-001, May 1, 1986], also referred to as the *Gold Book*, discusses temperature and its effects on beneficial uses, such as recreation and aquatic life.

- The Federal Water Pollution Control Administration in 1967 called temperature "a catalyst, a depressant, an activator, a restrictor, a

stimulator, a controller, a killer, and one of the most important water quality characteristics to life in water." The suitability of water for total body immersion is greatly affected by temperature. Depending on the amount of activity by the swimmer, comfortable temperatures range from 20°C to 30°C (68 °F to 86 °F).

- Temperature also affects the self-purification phenomenon in water bodies and therefore the aesthetic and sanitary qualities that exist. Increased temperatures accelerate the biodegradation of organic material both in the overlying water and in bottom deposits which makes increased demands on the dissolved oxygen resources of a given system. The typical situation is exacerbated by the fact that oxygen becomes less soluble as water temperature increases. Thus, greater demands are exerted on an increasingly scarce resource which may lead to total oxygen depletion and obnoxious septic conditions. Increased temperature may increase the odor of water because of the increased volatility of odor-causing compounds. Odor problems associated with plankton may also be aggravated.
- Temperature changes in water bodies can alter the existing aquatic community. Coutant (1972) has reviewed the effects of temperature on aquatic life reproduction and development. Reproductive elements are noted as perhaps the most thermally restricted of all life phases, assuming other factors are at or near optimum levels. Natural short-term temperature fluctuations appear to cause reduced reproduction of fish and invertebrates.

The Basin Plan lists temperature requirements for the receiving waters. Based on the requirements of the Basin Plan and a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*, a maximum effluent temperature limitation of 86 °F is included in the Order. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. The new temperature effluent limitation is reflective of new information available that indicates that the 100°F temperature which was formerly used in permits was not protective of aquatic organisms. A survey was completed for several kinds of fish and the 86°F temperature was found to be protective. It is impracticable to use a 7-day average or a 30-day average limitation for temperature, because it is not as protective as of beneficial uses as a daily maximum limitation is. A daily maximum limit is necessary to protect aquatic life and is consistent with the fishable/swimmable goals of the CWA.

xiv. Turbidity

Turbidity is an expression of the optical property that causes light to be scattered in water due to particulate matter such as clay, silt, organic matter, and microscopic organisms. Turbidity can result in a variety of water quality impairments. The effluent limitation for turbidity which reads, "For the protection of the water contact recreation beneficial use, the wastes discharged to water courses shall have received adequate treatment, so that the turbidity of the wastewater does not exceed: (a) a daily average of 0.2 Nephelometric turbidity units (NTUs) more than 5 percent of the time (72 minutes) during any 24 hour period; and (b) 0.5 NTUs at any time," is based on the Basin Plan's incorporation by reference of Title 22 and the definition of filtered wastewater. In comparison to other POTWs in this region, the turbidity limit for the Newhall Ranch WRP is more stringent than the typical turbidity requirement for other POTWs because the Newhall POTW proposes, according to their ROWD, to have microfiltration, rather than the conventional soils or bed of media filter which is typical in most other tertiary-level POTWs. The limitation, therefore reflects what the technology of choice by the Discharger is designed to achieve.

xv. Radioactivity

Radioactive substances are generally present in natural waters in extremely low concentrations. Mining or industrial activities increase the amount of radioactive substances in waters to levels that are harmful to aquatic life, wildlife, or humans. Section 301 (f) of the CWA contains the following statement with respect to effluent limitations for radioactive substances: "Notwithstanding any other provisions of this Act it shall be unlawful to discharge any radiological, chemical, or biological warfare agent, any high-level radioactive waste, or any medical waste, into the navigable waters." Chapter 5.5 of the Water Code contains a similar prohibition under Section 13375, which reads as follows: "The discharge of any radiological, chemical, or biological warfare agent into the waters of the state is hereby prohibited." However, rather than give a hard and fast absolute prohibition on radioactive substances, Regional Water Board staff have set the following effluent limit for radioactivity: "Radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Section 64443, of the California Code of Regulations, or subsequent revisions." The limit is based on the Basin Plan incorporation of Title 22, *Drinking Water Standards*, by reference, to protect beneficial uses. Therefore, the accompanying Order will retain the limit for radioactivity.

xvi. Iron

The effluent limitation of 300 mg/l for iron was developed based on the USEPA document, *Quality Criteria for Water 1986* [EPA 440/5-86-001, May 1, 1986], also referred to as the *Gold Book*, for the protection of GWR beneficial use.

300 µg/L is the secondary MCL for iron, however iron is not a priority pollutant. Some POTWs have a final effluent limitation for iron. Using the receiving water sample results and the TSD methodology, the discharge currently has reasonable potential to contribute to an exceedance of the Gold Book criteria; the secondary Federal MCL; and, the secondary California MCL for iron. The limit was expressed as a monthly average rather than a daily maximum, because it was assumed that the groundwater basins have assimilative capacity for iron. A WQBEL is now proposed which has to be met at the end of pipe, for protection of the GWR beneficial use in the surface water, since the discharge has reasonable potential to cause or contribute to an exceedance.

The California Toxic Rule (CTR) and State Implementation Policy (SIP) specify numeric objectives for toxic substances and the procedures whereby these objectives are to be implemented. The procedures include those used to conduct reasonable potential analysis to determine the need for effluent limitations for priority and non-priority pollutants.

3. Determining the Need for WQBELs

The Regional Water Board developed WQBELs for ammonia-nitrogen, nitrite-nitrogen, nitrite plus nitrite as nitrogen, and chloride based upon Total Maximum Daily Loads (TMDLs). The effluent limitations for these pollutants were established regardless of whether or not there is reasonable potential for the pollutants to be present in the discharge at levels that would cause or contribute to a violation of water quality standards. The Regional Water Board developed water quality-based effluent limitations for these pollutants pursuant to section 122.44(d)(1)(vii), which does not require or contemplate a reasonable potential analysis. The Regional Water Board has determined that the WQBEL is consistent with the assumptions of the TMDL. Similarly, compliance with the effluent limitation will satisfy the requirements of the TMDL. Similarly, the SIP at Section 1.3 recognizes that reasonable potential analysis is not appropriate if a TMDL has been developed.

In accordance with Section 1.3 of the SIP, the Regional Water Board conducted a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Water Board analyzed effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that demonstrate reasonable potential, numeric WQBELs are required. The RPA considers water quality criteria from the CTR and NTR, and when applicable, water quality objectives specified in the Basin Plan. To conduct the RPA, the Regional Water Board staff would normally identify the maximum effluent concentration (MEC) and maximum background concentration in the receiving water for each constituent, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limitation is needed.

Trigger 2 – If background water quality (B) > C and the pollutant is detected in the effluent, a limitation is needed.

Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, then best professional judgment is used to determine that a limit is needed.

Sufficient effluent and ambient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Water Board to conduct the RPA. Upon review of the data, and if the Regional Water Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

However, since the Newhall Ranch WRP has yet to be constructed, there is no effluent data available from which to select the MEC. Although, there is ample receiving water data available. This receiving water data provides information to be able to determine that the discharge could contribute to an exceedance. In the absence of final effluent data, Reasonable potential analysis was also conducted using the procedure in section 3.2 of the Technical Support Document, where other information and best professional judgement was used to prescribe effluent limits based on similar facilities with similar processes.

The RPA was performed for the priority pollutants regulated in the CTR for which data are available. Based on the RPA, there was reasonable potential for the Discharge to contribute to an exceedance of the following pollutants: antimony, arsenic, copper, lead, mercury, nickel, selenium, zinc, cyanide, acrylonitrile, iron, tetrachloroethylene, bis(2-ethylhexyl)phthalate, 1,4-dichlorobenzene, lindane, and 4,4-DDE.

4. WQBEL Calculations

- a. **Calculation Options.** Once RPA has been conducted using either the TSD or the SIP methodologies, WQBELs are calculated. Alternative procedures for calculating WQBELs include:

1. Use WLA from applicable TMDL
 2. Use a steady-state model to derive Maximum Daily Effluent Limits and Average Monthly Effluent Limits.
 3. Where sufficient data exist, use a dynamic model which has been approved by the State Water Board.
- b. **SIP Calculation Procedure.** Section 1.4 of the SIP requires the step-by-step procedure to “adjust” or convert CTR numeric criteria into Average Monthly Effluent Limitations (AMELs) and Maximum Daily Effluent Limitations (MDELs), for toxics.

Step 3 of Section 1.4 of the SIP (page 8) lists the statistical equations that adjust CTR criteria for effluent variability.

Step 5 of Section 1.4 of the SIP (page 10) lists the statistical equations that adjust CTR criteria for averaging periods and exceedance frequencies of the criteria/objectives. This section also reads, “For this method only, maximum daily effluent limitations shall be used for publicly-owned treatment works (POTWs) in place of average weekly limitations.

Sample calculation for 4,4'-DDE:

Step 1: Identify applicable water quality criteria.

From California Toxics Rule (CTR), we can obtain the Criterion Maximum Concentration (CMC) and the Criterion Continuous Concentration (CCC).

Freshwater Aquatic Life Criteria:

CMC = NA $\mu\text{g/L}$ (CTR page 31715, column B1) and

CCC = NA $\mu\text{g/L}$ (CTR page 31715, column B2); and

Human Health Criteria for Organisms only = 0.00059 $\mu\text{g/L}$ (CTR page 31715, column D2).

Step 2: Calculate effluent concentration allowance (ECA)

ECA = Criteria in CTR, since no dilution is allowed.

Step 3: Determine long-term average (LTA) discharge condition

i. **Calculate CV:**

CV = Standard Deviation/Mean

= 0.6 (By default because data was > 80% nondetect, SIP page 6)

- ii. Find the ECA Multipliers from SIP Table 1 (page 7), or by calculating them using equations on SIP page 6. When CV = 0.6, then:

$$\begin{aligned}\text{ECA Multiplier acute} &= 0.321 \text{ and} \\ \text{ECA Multiplier chronic} &= 0.527\end{aligned}$$

- iii. $\text{LTA acute} = \text{ECA acute} \times \text{ECA Multiplier acute}$
 $= \text{NA } \mu\text{g/L} \times 0.321 = \text{NA } \mu\text{g/L}$
- iv. $\text{LTA chronic} = \text{ECA chronic} \times \text{ECA Multiplier chronic}$
 $= \text{NA } \mu\text{g/L} \times 0.527 = \text{NA } \mu\text{g/L}$

Step 4: Select the lowest LTA

In this case, the lowest LTA is not applicable.

Step 5: Calculate the Average Monthly Effluent Limitation (AMEL) & Maximum Daily Effluent Limitation (MDEL) for AQUATIC LIFE

- i. Find the multipliers. You need to know CV and n (frequency of sample collection per month). If effluent samples are collected 4 times a month or less, then n = 4. CV was determined to be 0.6 in a previous step.

$$\begin{aligned}\text{AMEL Multiplier} &= 1.552 \\ \text{MDEL Multiplier} &= 3.114\end{aligned}$$

- ii. $\text{AMEL aquatic life} = \text{lowest LTA (from Step 4)} \times \text{AMEL Multiplier}$
 $= \text{NA } \mu\text{g/L} \times 1.552 = \text{NA } \mu\text{g/L}$
- iii. $\text{MDEL aquatic life} = \text{lowest LTA (from Step 4)} \times \text{AMEL Multiplier}$
 $= \text{NA } \mu\text{g/L} \times 3.114 = \text{NA } \mu\text{g/L}$

Step 6: Find the Average Monthly Effluent Limitation (AMEL) & Maximum Daily Effluent Limitation (MDEL) for HUMAN HEALTH

- i. Find factors. Given CV = 0.6 and n = 4.

For AMEL human health limit, there is no factor.
The MDEL/AMEL human health factor = 2.006

- ii. $\text{AMEL human health} = \text{ECA} = 0.00059 \mu\text{g/L}$
- iii. $\text{MDEL human health} = \text{ECA} \times \text{MDEL/AMEL factor}$
 $= 0.00059 \mu\text{g/L} \times 2.006 = 0.001184 \mu\text{g/L}$

Step 7: Compare the AMELs for Aquatic life and Human health and select the lowest. Compare the MDELs for Aquatic life and Human health and select the lowest

- i. Lowest AMEL = 0.00059 µg/L (Based on Human Health protection)
 - ii. Lowest MDEL = 0.001184 µg/L (Based on Human Health protection)
- c. **Mass based limits.** 40 CFR section 122.45(f)(1) requires that except under certain conditions, all permit limits, standards, or prohibitions be expressed in terms of mass units. 40 CFR section 122.45(f)(2) allows the permit writer, at its discretion, to express limits in additional units (e.g., concentration units). The regulations mandate that, where limits are expressed in more than one unit, the permittee must comply with both.

Generally, mass-based limits ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limits. Concentration-based effluent limits, on the other hand, discourage the reduction in treatment efficiency during low-flow periods and require proper operation of the treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low-flow periods and still meet its mass-based limits. To account for this, this permit includes mass and concentration limits for some constituents

- d. **Mixing Zones and Dilution Credits** - Mixing zones, dilution credits, and attenuation factors are not allowed in the accompanying Order. Allowance of a mixing zone is in the Regional Water Board's discretion under Section 1.4.2 of the SIP and under the Basin Plan (Basin Plan Chapter 4, page 30). If the Discharger subsequently conducts appropriate mixing zone and dilution credit studies, the Regional Water Board can evaluate the propriety of granting a mixing zone or establishing dilution credits. The Regional Water Board has concluded mixing zones and dilution credits would be inappropriate to grant, at this time, in light of the following factors:

1. Several reaches of the Santa Clara River [including those subject to this Order] are 303(d) listed (i.e., impaired) for certain constituents;
2. Impaired waters do not have the capacity to assimilate pollutants of concern at concentrations greater than the applicable objective;
3. For the protection of the beneficial uses is listed in the Order;

4. Consistent with Antidegradation Policies;
5. Because a mixing zone study has not been conducted; and,
6. Because hydrologic models of the discharge and the receiving waters have not been conducted.

On July 16, 2003, the State Water Board adopted Order No. WQO 2003-0009, directing Regional Water Board staff to work with CSDLAC, once data was provided, to determine whether dilution and attenuation are appropriate factors to consider in developing effluent limits to protect the GWR beneficial use, in the Whittier Narrows WRP NPDES permit. However, this does not apply to the Newhall Ranch WRP because Newhall has not provided the necessary site-specific data or studies regarding the ground water basins in the Newhall area.

- e. Interim Monitoring Requirements** - In accordance with the SIP, the Regional Water Board may impose interim monitoring requirements upon the Discharger, so that the Discharger obtains adequate ambient, background water data for priority pollutants upstream of the discharge point as well as suitable effluent data. The Executive Officer directed major Dischargers to begin an interim monitoring program for the duration of 18 months, beginning July 2001. The monitoring results that will be obtained when Newhall Ranch WRP implements the monitoring requirements contained in Attachment E will be used by Regional Water Board staff to conduct RPA once again, to determine if additional numeric limitations are necessary. Section 1.3, Step 8, of the SIP authorizes the Regional Water Board to use the gathered data to conduct RPA, as outlined in Steps 1 through 7, and determine if a water quality-based effluent limitation is required.

A reopener provision is included in this Order that allows the permit to be reopened to allow the inclusion of new numeric limitations for any constituent that exhibits reasonable potential to cause or contribute to exceedance of applicable water quality objectives.

Summary of Water Quality-based Effluent Limitations Discharge Point 001

Table 5. Summary of Water Quality-based Effluent Limitations

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Total ammonia (NH ₃ as N)	mg/L	1.93 ²	--	3.87 ³	--	--
	lbs/day ¹	25	--	65	--	--
Nitrate-N + Nitrite-N	mg/L	5	--	--	--	--
	lbs/day ¹	80	--	--	--	--
Nitrite-N	mg/L	0.9	--	--	--	--
	lbs/day ¹	15	--	--	--	--
Detergents (as MBAS)	mg/L	0.5	--	--	--	--
	lbs/day ¹	8	--	--	--	--
Total residual chlorine	mg/L	--	--	0.1	--	--
Antimony	µg/L	6	--	--	--	--
	lbs/day ¹	0.1	--	--	--	--
Arsenic	µg/L	10	--	--	--	--
	lbs/day ¹	0.2	--	--	--	--
Copper	µg/L	22	--	44	--	--
	lbs/day ¹	0.37	--	0.73	--	--
Lead	µg/L	13	--	26	--	--
	lbs/day ¹	0.22	--	0.43	--	--
Mercury	µg/L	0.051	--	0.10	--	--
	lbs/day ¹	0.00085	--	0.0017	--	--
Nickel	µg/L	100	--	--	--	--
	lbs/day ¹	1.7	--	--	--	--
Selenium	µg/L	4.1	--	8.2	--	--

¹ The mass emission rates are based on the plant design flow rate of 2.0 mgd, and are calculated as follows: Flow(MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. However, the design capacity will incrementally increase to 6.8 MGD, as the phased plant upgrades approach completion. The mass-based effluent limitation will accordingly be modified following an Anti-degradation analysis demonstration conducted by the Discharger, and upon certification and approval of increased treatment plant capacity. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

² This is the monthly average effluent limit calculated according to the Implementation Plan for ammonia in the Basin Plan, which specifies how to translate the Ammonia WQO into a final effluent limit, consistent with the assumptions of the Santa Clara River Nitrogen Compounds TMDL, Resolution No. 03-011.

³ This is the daily maximum effluent limit calculated according to the Implementation Plan for ammonia in the Basin Plan, which specifies how to translate the Ammonia WQO into a final effluent limit, consistent with the assumptions of the Santa Clara River Nitrogen Compounds TMDL, Resolution No. 03-011.

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Zinc	lbs/day	0.068	--	0.14	--	--
	µg/L	5000	--	--	--	--
	lbs/day ¹	83	--	--	--	--
Cyanide	µg/L	4.2	--	8.5	--	--
	lbs/day ¹	0.07	--	0.14	--	--
Acrylonitrile	µg/L	0.66	--	1.3	--	--
	lbs/day ¹	0.011	--	0.022	--	--
Tetrachloroethylene	µg/L	5	--	--	--	--
	lbs/day ¹	0.08	--	--	--	--
Bis(2-ethylhexyl)phthalate	µg/L	4	--	--	--	--
	lbs/day ¹	0.07	--	--	--	--
p-Dichlorobenzene (1,4-Dichlorobenzene)	µg/L	5	--	--	--	--
	lbs/day ¹	0.08	--	--	--	--
Lindane	µg/L	0.2	--	--	--	--
	lbs/day	0.003	--	--	--	--
4,4-DDE	µg/L	0.00059	--	0.0012	--	--
	lbs/day	0.0000098	--	0.00002	--	--
Iron	µg/L	300	--	--	--	--
	lbs/day	5	--	--	--	--

5. Whole Effluent Toxicity (WET)

Ambient monitoring data indicates that the background concentration in the lower Santa Clara is toxic to aquatic organisms, and therefore exceeds water quality standards. Final effluent water quality data for the Newhall WRP is not available. However, effluent data contained in monitoring reports for other POTWs in the watershed, shows that chronic toxicity in the effluent has sometimes exceeded 1Tuc (monthly median). Therefore, pursuant to the TSD, reasonable potential exists for toxicity. As such, the permit should contain a numeric effluent limitation for toxicity.

The toxicity numeric effluent limitations are based on:

- a. CFR 122.44(d)(v) – limits on whole effluent toxicity are necessary when chemical-specific limits are not sufficient to attain and maintain applicable numeric or narrative water quality standards;
- b. 40 CFR 122.44(d)(vi)(A) – where a State has not developed a water quality criterion for a specific pollutant that is present in the effluent and has reasonable potential, the permitting authority can establish effluent limits using numeric water quality criterion;
- c. Basin Plan objectives and implementation provisions for toxicity;
- d. Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Programs Final May 31, 1996;
- e. Whole Effluent Toxicity (WET) Control Policy July 1994; and,
- f. Technical Support Document (several chapters and Appendix B).

However, the circumstances warranting a numeric chronic toxicity effluent limitation when there is reasonable potential were under review by the State Water Resources Control Board (State Water Board) in SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions]. On September 16, 2003, at a public hearing, the State Water Board adopted Order No. 2003-0012 deferring the issue of numeric chronic toxicity effluent limitations until Phase II of the SIP is adopted. In the mean time, the State Water Board replaced the numeric chronic toxicity limit with a narrative effluent limitation and a 1 Tuc trigger, in the Long Beach and Los Coyotes WRP NPDES permits. This permit contains a similar narrative chronic toxicity effluent limitation, with a numeric trigger for accelerated monitoring.

Phase II of the SIP has been adopted, however, the toxicity control provisions were not revised.

On January 17, 2006, the State Water Board Division of Water Quality held a California Environmental Quality Act (CEQA) scoping meeting to seek input on the scope and content of the environmental information that should be considered in the planned revisions of the Toxicity Control Provisions of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). However, the Toxicity Control Provisions of the SIP continue unchanged.

This Order contains a reopener to allow the Regional Water Board to modify the permit, if necessary, consistent with any new policy, law, or regulation. Until such time, this Order will have toxicity limitations that are consistent with the State Water Board's precedential decision.

Acute Toxicity Limitation:

The Dischargers may test for Acute toxicity by using USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, October 2002 (EPA-821-R-02-012). Acute toxicity provisions in the accompanying Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate acute toxicity monitoring and take further actions to identify the source of toxicity and to reduce acute toxicity.

Chronic Toxicity Limitation and Requirements:

Chronic toxicity provisions in the accompanying Order are derived from the Basin Plan's toxicity standards (Basin Plan 3-16 and 3-17). The provisions require the Discharger to accelerate chronic toxicity monitoring and take further actions to identify the source of toxicity and to reduce chronic toxicity. The monthly median trigger of 1.0 TU_c for chronic toxicity is based on *USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs* Final May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8). In cases where effluent receives no dilution or where mixing zones are not allowed, the 1.0 TU_c chronic criterion should be expressed as a monthly median. The “median” is defined as the middle value in a distribution, above which and below which lie an equal number of values. For example, if the results of the WET testing for a month were 1.5, 1.0, and 1.0 TU_c, the median would be 1.0 TU_c.

The *USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity (WET) Programs* Final May 31, 1996 (Chapter 2 – Developing WET Permitting Conditions, page 2-8) recommends two alternatives: using 2.0 TU_c as the maximum daily limit; or using a statistical approach to develop a maximum daily effluent limitation.

D. Final Effluent Limitations

Section 402(o) of the CWA and 40 CFR 122.44 require that effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders based on the submitted sampling data. However, since this is a new discharge, there is no existing Order. The final effluent limitations established in this Order, for the discharge of tertiary-treated effluent through Discharge Serial No.EFF-001, as proposed in the ROWD, are listed below in Table 7:

1. Satisfaction of Anti-Backsliding Requirements

Since this is a new discharge, all proposed effluent limitations and requirements contained in the accompanying Order are new. Therefore, there is no relaxation of effluent limitations. Furthermore, the proposed effluent limitations are at least as stringent as the effluent limitations contained in a similar Order for a nearby facility, the Valencia Water Reclamation Plant. The proposed Order is consistent with the anti-backsliding requirements of the CWA and federal regulations.

2. Satisfaction of Antidegradation Policy

The Discharger proposes to use microfiltration and reverse osmosis in their treatment process. These are state-of-the art treatment facilities which are expected to produce high quality tertiary-treated effluent. Because modeling for chloride indicates no adverse impact or degradation of existing water quality, there should be no impact from other less conservative pollutants. In addition, groundwater monitoring will ensure that no degradation to groundwater resources occurs. The proposed discharge is consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16.

3. Stringency of Requirements for Individual Pollutants

This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (BOD), total suspended solids (TSS), and hydrogen ion concentration (pH). Restrictions on BOD, TSS, and pH are specified in federal regulations as discussed in Finding F, and the permit's technology-based pollutant restrictions are no more stringent than required by the CWA. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on

May 18, 2000. Most beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR 131.21(c)(1). For the most part, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

This Order contains pollutant restrictions that are more stringent than applicable federal requirements and standards. Specifically, this Order includes effluent limitations for bis(2-ethylhexyl)phthalate that are more stringent than applicable federal standards, but that are nonetheless necessary to meet numeric objectives or protect beneficial uses. The rationale for including these limitations is explained in this Fact Sheet. In addition, the Regional Water Board has considered the factors in Water Code section 13241.

The California MCLs are the same as the USEPA MCL for iron and tetrachloroethylene, therefore the limits for iron and tetrachloroethylene, based on the MCLs, are not more stringent than federal requirements. The California MCL for Arsenic is less stringent than the USEPA MCL, therefore the limit for Arsenic is not more stringent than the federal requirement. The California MCL for Bis(2-ethylhexyl)phthalate is more stringent than the USEPA MCL and more stringent than the CTR criteria, therefore the monthly average effluent limitation for Bis(2-ethylhexyl)phthalate is the only limit more stringent than the federal requirements. Therefore, an economic analysis should be done for Bis(2-ethylhexyl)phthalate.

According to Section 13241 of the CWC, the factors to be considered by a regional board in establishing water quality objectives include, but are not necessarily be limited to, all of the following:

- (a) Past, present, and probable future beneficial uses of water.
- (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- (d) Economic considerations.
- (e) The need for developing housing within the region.
- (f) The need to develop and use recycled water.

Regional Board staff have considered all of the above factors.

The proposed Order is protective of all beneficial uses of surface waters (using CWA) and ground water (using CWC);

The environmental characteristics of the discharge and of the watershed in which the facility is located have been taken into consideration and provisions of the applicable TMDLs have been incorporated into the Order, in an attempt to restore waters under section 303(d) of the CWA;

Limitations which could reasonably be achieved have been placed in the Order to protect the water quality of the immediate receiving waters and those located downstream of the discharge point;

Economic considerations have also been considered

1. **DHS' Economic Analysis.** The technical and economic feasibility of regulating MCLs is evaluated as part of the MCL development and adoption process by the California Department of Health Services, a sister agency. The technical feasibility includes an evaluation of commercial laboratories' ability to analyze for and detect the chemical in drinking water, the costs of monitoring, and the costs of treatment required to remove it.
2. **Requirements under future WDR,WRR Order for Recycling**
Newhall Ranch Sanitation District will apply for water recycling requirements. They will be required to comply with the Maximum Contaminant Levels of the current California Drinking Water Standards for inorganic and organic chemicals, under a separate order which serves as waste discharge requirements for water recycling. Since the Newhall Ranch WRP will have advanced treatment technology, the discharge is expected to meet the MCLs, and no additional treatment units are believed to be necessary in order to meet the limitations in the accompanying NPDES permit.
3. **Similar Facilities.** Other POTWs in Region 4 have similar NPDES permit requirements. When Regional Board staff was preparing the first set of permits that would implement the SIP and the CTR, they asked the State Board, Division of Water Quality's Standard Development Section to prepare an economic analysis of the cost of complying with the California Toxics Rule for the five Los Angeles County Sanitation District (LACSD) inland POTWs in the San Gabriel River Watershed. The State Board contracted Sciences Applications International Corporation (SAIC) to prepare the economic analysis. Their report titled, *Potential Costs of Complying with the California Toxics Rule for Five Los Angeles County Sanitation District Facilities* (March 21, 2001), presented a worst case scenario and a most likely control scenario for all five facilities. Of the five LACSD POTWs, the smallest is the Pomona WRP, with a 15 MGD capacity. For the Pomona WRP, the worst case control scenario would require the use of Granular Activated Carbon (GAC), with a construction cost of about

\$12 Million, and an operation costs of \$387,000 per year. The most likely control scenario required implementation of a source control or pollutant minimization program, a plant study for process optimization, and an improved coagulant chemical addition process, at a cost of \$141,000 per year. Although the focus of the study was to consider CTR-based limits, the study did include consideration of the 4 µg/L MCL-based limit for Bis(2-ethylhexyl)phthalate. The LACSD plants have focused on source control and pollution prevention, process optimization, and cleaner laboratory analytical techniques to achieve compliance with their permit limitations. In the case of Bis(2-ethylhexyl)phthalate, using cleaner sampling techniques has made a big difference in eliminating the amounts of detects (or false positives) obtained. The clean hands technique involved using gloves and bottles that were free of phthalates, for example using teflon and glassware. In no case did any of the LACSD POTWs have to install costly treatment systems for the removal of CTR-based or MCL-based pollutants.

Regional Board staff conclude that additional treatment units would not be required to meet the new limitations contained in the accompanying Order. Newhall Ranch Sanitation District may conduct an economic analysis and submit it to the Regional Board for consideration, during the public comment period, if so desired.

We are aware that Newhall Land anticipates building additional housing projects, aside from the Landmark Village project. The Newhall Ranch WRP is designed in such a way that it will be able to expand its treatment capacity in phases, to accommodate the additional sewage generated by the new housing developments.

The Discharger has not submitted any economic information to indicate what the cost of complying with this Order would be. As discussed in other sections of the Fact Sheet, the individual pollutant restrictions are reasonably necessary to protect beneficial uses identified in the Basin Plan, and the economic information related to costs of compliance are not sufficient, in the Regional Water Board's determination, to justify failing to protect beneficial uses. Since this is a new discharge, it is not appropriate to issue a Time Schedule Order.

Summary of Final Effluent Limitations Discharge Point 001

Table 6. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
BOD ₅ 20°C	mg/L	20	30	45	--	--	Technology
	lbs/day	330	500	750	--	--	Calculated
Total Suspended solids (TSS)	mg/L	15	40	45	--	--	Technology
	lbs/day	250	670	750	--	--	Calculated
pH	standard units	--	--	--	6.5	8.5	Basin Plan
Total ammonia (NH ₃ as N)	mg/L	1.93 ⁴	--	3.87 ⁵	--	--	TMDL/Basin Plan WQO
	lbs/day ¹	25	--	65	--	--	Calculated
Nitrate-N + Nitrite-N	mg/L	5	--	--	--	--	TMDL/Basin Plan WQO
	lbs/day ¹	80	--	--	--	--	Calculated
Nitrite-N	mg/L	0.9	--	--	--	--	Basin Plan WQO
	lbs/day ¹	15	--	--	--	--	Calculated
Detergents (as MBAS)	mg/L	0.5	--	--	--	--	Basin Plan WQO
	lbs/day ¹	8	--	--	--	--	Calculated
Total residual chlorine	mg/L	--	--	0.1	--	--	Basin Plan WQO
Antimony	µg/L	6	--	--	--	--	TSD Chap.3.2
	lbs/day ¹	0.1	--	--	--	--	Calculated
Arsenic	µg/L	10	--	--	--	--	TSD Chap.3.2
	lbs/day ¹	0.2	--	--	--	--	Calculated
Copper	µg/L	22	--	44	--	--	CTR Aquatic Life
	lbs/day ¹	0.37	--	0.73	--	--	Calculated

⁴ This is the thirty-day Ammonia-N (NH₃-N) numeric target for Reach 7 of the Santa Clara River at the County Line, according to the Santa Clara River Nitrogen Compounds TMDL, Resolution No. 03-011, applied as the average monthly effluent limitation.

⁵ This is the one-hour Ammonia-N (NH₃-N) numeric target for Reach 7 of the Santa Clara River at the County Line, according to the Santa Clara River Nitrogen Compounds TMDL, Resolution No. 03-011, applied as the daily maximum effluent limitation.

Parameter	Units	Effluent Limitations					Basis
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	
Lead	µg/L	13	--	26	--	--	CTR Aquatic Life
	lbs/day ¹	0.22	--	0.43	--	--	Calculated
Mercury	µg/L	0.051	--	0.10	--	--	CTR Human health
	lbs/day ¹	0.00085	--	0.0017	--	--	Calculated
Nickel	µg/L	100	--	--	--	--	TSD Chap.3.2
	lbs/day ¹	1.7	--	--	--	--	Calculated
Selenium	µg/L	4.1	--	8.2	--	--	CTR Aquatic Life
	lbs/day	0.068	--	0.14	--	--	Calculated
Zinc	µg/L	5000	--	--	--	--	TSD Chap.3.2
	lbs/day ¹	83	--	--	--	--	Calculated
Cyanide	µg/L	4.2	--	8.5	--	--	TSD Chap.3.2
	lbs/day ¹	0.07	--	0.14	--	--	Calculated
Acrylonitrile	µg/L	0.66	--	1.3	--	--	TSD Chap.3.2
	lbs/day ¹	0.011	--	0.022	--	--	Calculated
Tetrachloroethylene	µg/L	5	--	--	--	--	TSD Chap.3.2
	lbs/day ¹	0.08	--	--	--	--	Calculated
Bis(2-ethylhexyl) phthalate	µg/L	4	--	--	--	--	TSD Chap.3.2
	lbs/day ¹	0.07	--	--	--	--	Calculated
p-Dichlorobenzene (1,4-Dichlorobenzene)	µg/L	5	--	--			TSD Chap.3.2--
	lbs/day ¹	0.08	--	--			Calculated
Lindane	µg/L	0.2	--	--			TSD Chap.3.2
	lbs/day	0.003	--	--			Calculated
4,4-DDE	µg/L	0.00059	--	0.0012			CTR Human health
	lbs/day	0.0000098	--	0.00002			Calculated
Iron	µg/L	300	--	--			Basin Plan/ MCL
	lbs/day	5	--	--			Calculated

E. Interim Effluent Limitations

Not Applicable. This is a new discharge.

F. Land Discharge Specifications

Not Applicable. Holding ponds at the Newhall Ranch WRP will be concrete-lined and are not designed for purposeful groundwater recharge.

G. Reclamation Specifications

Not Applicable. Water recycling requirements will be regulated under a separate order. Newhall intends on recycling almost 100% of its treated effluent during dry weather.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Los Angeles Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 CFR § 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in the Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Basin Plan.

B. Groundwater

The Basin Plan contains numeric and narrative water quality objectives applicable to all groundwaters within the Los Angeles Region. Water quality objectives include incorporation by reference to Title 22 drinking water standards, bacteria objectives, and others. Limitations are included in this Order to ensure protection of beneficial uses of the groundwater receiving water.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

Influent monitoring is required:

- To determine compliance with the permit conditions for BOD₅ 20°C and suspended solids removal rates;
- To assess treatment plant performance;
- To assess the effectiveness of the Pretreatment Program (once a pretreatment program is in place); and,
- As a requirement of the Pollution Minimization Program

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed Monitoring and Reporting Program (Attachment E). This provision requires compliance with the Monitoring and Reporting Program, and is based on 40 CFR 122.44(i), 122.62, 122.63, and 124.5. The Monitoring and Reporting Program is a standard requirement in almost all NPDES permits (including the proposed Order) issued by the Regional Water Board. In addition to containing definition of terms, it specifies general sampling/analytical protocols and the requirements of reporting spills, violation, and routine monitoring data in accordance with NPDES regulations, the California Water Code, and Regional Water Board policies. The Monitoring and Reporting Program also contains sampling program specific for the Discharger's wastewater treatment plant. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified. Further, in accordance with Section 1.3 of the SIP, a periodic monitoring is required for all priority pollutants defined by the CTR, for which criteria apply and for which no effluent limitations have been established, to evaluate reasonable potential to cause or contribute to an excursion above a water quality standard.

Monitoring for those pollutants expected to be present in the discharge from the facility, will be required as shown on the proposed Monitoring and Reporting Program (Attachment E) and as required in the SIP. Monitoring requirements are similar to those found in the near-by Valencia WRP's Monitoring and Reporting Program. Annual monitoring for priority pollutants in the effluent is required in accordance with the SIP.

Since this is a new discharge, the effluent monitoring requirements are new.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

This requirement establishes conditions and protocol by which compliance with the Basin Plan narrative water quality objective for toxicity will be demonstrated and in accordance with Section 4.0 of the SIP. Conditions include required monitoring and evaluation of the effluent for acute and chronic toxicity and numerical values for chronic toxicity evaluation to be used as 'triggers' for initiating accelerated monitoring and toxicity reduction evaluation(s).

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water.

2. Groundwater

Groundwater monitoring is required to determine compliance with groundwater limitations and to track impacts to the groundwater basins.

E. Other Monitoring Requirements

1. Watershed Monitoring and Bioassessment Monitoring

The goals of the Watershed-wide Monitoring Program including the bioassessment monitoring for the San Gabriel River Watershed are to:

- Determine compliance with receiving water limits;
- Monitor trends in surface water quality;
- Ensure protection of beneficial uses;
- Provide data for modeling contaminants of concern;
- Characterize water quality including seasonal variation of surface waters within the watershed;
- Assess the health of the biological community; and
- Determine mixing dynamics of effluent and receiving waters in the estuary.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

Section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

This provision is based on 40 CFR Part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

- a. Antidegradation Analysis and Engineering Report for Proposed Plant Expansion.** This provision is based on the State Water Resources Control Board Resolution No. 68-16, which requires the Regional Water Board in regulation the discharge of waste to maintain high quality waters of the State, the Discharger must demonstrate that it has implemented adequate controls (e.g., adequate treatment capacity) to ensure that high quality waters will be maintained. This provision requires the Discharger to clarify it has increase plant capacity through the addition of new treatment system(s) to obtain alternative effluent limitations for the discharge from the treatment system(s). This provision requires the Discharger to report specific time schedules for the plants projects. This provision requires the Discharger to submit report to the Regional Water Board for approval.

- b. **Operations Plan for Proposed Expansion.** This provision is based on Section 13385(j)(1)(D) of the CWC and allows a time period not to exceed 90 days in which the Discharger may adjust and test the treatment system(s). This provision requires the Discharger to submit an Operations Plan describing the actions the Discharger will take during the period of adjusting and testing to prevent violations.
- c. **Treatment Plant Capacity.** The treatment plant capacity study required by this Order shall serve as an indicator for the Regional Water Board regarding Facility's increasing hydraulic capacity and growth in the service area.

3. Best Management Practices and Pollution Prevention

- a. **Pollutant Minimization Program.** This provision is based on the requirements of Section 2.4.5 of the SIP.

4. Construction, Operation, and Maintenance Specifications

This provision is based on the requirements of 40 CFR 122.41(e) and similar requirements for similar facilities.

5. Special Provisions for Municipal Facilities (POTWs Only)

- a. **Biosolids Requirements.** To implement CWA Section 405(d), on February 19, 1993, USEPA promulgated 40 CFR 503 to regulate the use and disposal of municipal sewage sludge. This regulation was amended on September 3, 1999. The regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. It is the responsibility of the Discharger to comply with said regulations that are enforceable by USEPA, because California has not been delegated the authority to implement this program. The Discharger is also responsible for compliance with WDRs and NPDES permits for the generation, transport and application of biosolids issued by the State Water Board, other Regional Water Boards, Arizona Department of Environmental Quality or USEPA, to whose jurisdiction the Facility's biosolids will be transported and applied.
- b. **Pretreatment Requirements.** This Order does not include any requirements for a Pretreatment Program because the discharge is less than 2.0 MGD and because the POTW does not have any significant industrial users (SIUs). In the future, once the design flow approaches 5.0 MGD, the Discharger will be required to develop a Pretreatment Program; and implement and enforce the pretreatment program in its entire service area. At that time, the permit will contain pretreatment requirements consistent with applicable effluent limitations, national standards of performance, and toxic and performance effluent standards established pursuant to Sections 208(b), 301, 302, 303(d), 304, 306, 307, 403,

404, 405, and 501 of the CWA, and amendments thereto. The permit would also contain requirements for the implementation of an effective pretreatment program pursuant to Section 307 of the CWA; 40 CFR 35 and 403; and/or Section 2233, Title 23, California Code of Regulations.

- c. **Spill Reporting Requirements.** This Order established a reporting protocol for how different types of spills, overflow or bypasses of raw or partially treated sewage from its collection system or treatment plant covered by this Order shall be reported to regulatory agencies.

The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003-DWQ (General Order) on May 2, 2006. The General Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions.

Furthermore, the General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. The Discharger must comply with both the General Order and this Order.

6. Other Special Provisions

Not applicable.

7. Compliance Schedules

Not applicable because this is a new discharge.

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the Newhall Ranch Sanitation District's Newhall Ranch Water Reclamation Plant. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and

has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the following: publication in local newspapers.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on July 6, 2007. However, the comment period was extended by a few days. Comments were due by the close of business on July 18, 2007. Comments on the strikeout & underline sections of the Revised Tentative were due by close of business on August 20, 2007.

C. Public Hearing Date and Location

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: September 6, 2007
Time: 9:00 AM
Location: Metropolitan Water District of Southern California Board Room
700 North Alameda Street
Los Angeles, California

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is <http://www.waterboards.ca.gov/losangeles/> where you can access the current agenda for changes in dates and locations.

D. Scope of Hearing

The validity of the TMDL for Chloride in the Upper Santa Clara River, the TMDL for Nitrogen Compounds in the Upper Santa Clara River, nor the EIR for the Newhall Land development are at issue before the Regional Water Board in this proceeding. Evidence or argument that challenges the validity of those TMDLs or the EIR, or any aspects of them will not be permitted. The only matter before the Board is the adoption of new Waste Discharge Requirements and permit under the National Pollutant

Discharge Elimination System (NPDES) to incorporate applicable water quality objectives associated with discharges to the waters of the United States.

E. Availability of Documents

The Report of Waste Discharge (ROWD), other documents relied upon, tentative effluent limitations and special provisions, comments received, and other information are on file and are available for inspection and copying between the hours of 8:00 a.m. and 4:30 p.m. by appointment at the following address:

Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Arrangements for file review and/or obtaining copies of the documents may be made by calling the Los Angeles Regional Water Board at (213) 576-6600. Additionally, the agenda, the fact sheet, the draft order will be available online at:

<http://www.waterboards.ca.gov/losangeles/>

under the "Tentative Permits" heading in the left hand margin.

The entire file will become a part of the administrative record of this proceeding, irrespective of whether individual documents are specifically referenced during the hearing or contained in the agenda packet. The entire file will not be present in the hearing room. In addition to the materials generated for this proceeding, the file includes the administrative records for Resolution 2002-011 (relating to the Ammonia Criteria Implementation Plan) and other applicable Basin Plan amendments. Should any interested persons desire staff to bring to the hearing any particular documents that are not included in the agenda packet, they must submit a written or electronic request to staff during business hours, not later than five business days before the hearing. The request must identify the documents with enough specificity for staff to locate them.

F. Public Comments and Submittal of Evidence

Persons wishing to comment on, or object to, the tentative waste discharge requirements, or submit evidence for the Board to consider, are invited to submit them in writing to Veronica Cuevas at the above address, or send them electronically to vcuevas@waterboards.ca.gov. To be evaluated and responded to by Regional Water Board staff, included in the Board's agenda folder, and fully considered by the Board, written comments or testimony regarding the tentative must be received no later than close of business July 18, 2007. Failure to comply with these requirements is grounds for the Regional Water Board to refuse to admit the proposed written comment or exhibit into evidence pursuant to section 648.4, title 23 of the California Code of Regulations.

G. Nature of Hearing

This proceeding will be a formal adjudicatory proceeding. For such proceedings, the Regional Water Board follows procedures established by the State Water Resources Control Board. These procedures are set forth in regulations commencing with section 647 of title 23 of the California Code of Regulations, in particular, Article 2, commencing with section 648.

H. Parties to the Hearing

The following are the parties to this proceeding:

1. The applicant/permittee (Newhall Ranch Sanitation District)
2. Regional Water Board Staff

Any other persons requesting party status must submit a written or electronic request to staff not later than 20 business days before the hearing. All parties will be notified if other persons are so designated.

I. Hearing Procedure

The board meeting, of which this hearing is a part, will start at 9:00 a.m. Interested persons are invited to attend. When the agenda item is called, staff will present the matter under consideration, after which oral statements from parties or interested persons will be heard. For accuracy of the record, all important testimony should be in writing. The Board will include in the administrative record written transcriptions of oral testimony that is actually presented at the hearing. Oral testimony may be limited to five minutes or less for each interested person, depending on the number of interested persons wishing to be heard.

Parties or interested persons with similar concerns or opinions are encouraged to choose one representative to speak, and are encouraged to coordinate their presentations with each other. Parties will be advised after the receipt of public comments, but prior to the date of the hearing, of the amount of time each is allocated for presentations. That decision will be based upon the complexity and number of issues under consideration, the extent to which the parties have coordinated, the number of parties and interested persons anticipated, and the time available for the hearing. The parties are invited to contact staff not later than July 26, 2007 (two weeks prior to the hearing) to discuss how much time they believe is necessary for their presentations, and staff will endeavor to accommodate reasonable requests. At the conclusion of testimony, the Board will deliberate in open or close session, and render a decision.

The Board does not generally require the prior identification of witnesses or the cross examination of witnesses, or other procedures not specified in this notice. Parties or persons with special procedural requests or requests for alternative hearing procedures should contact staff, who will endeavor to accommodate reasonable requests. Objections to any procedure to be used during this hearing must be submitted in writing no later than close of business 15 business days prior to the date of the hearing. (Any objections related to the amount of time allocated for parties' presentations must be submitted within two business days of notice thereof, if that date is less than 15 business days before the hearing.) Absent such objections, any procedure not specified in this hearing notice will be waived pursuant to section 648(d) of title 23 of the California Code of Regulations. Procedural objections will not be entertained at the hearing.

If there should not be a quorum on the scheduled date of this meeting, all cases will be automatically continued to the next scheduled meeting on October 4, 2007. A continuance will not extend any time set forth herein.

J. Staff Contacts

If you have any question regarding this proposed action, please contact Veronica Cuevas at (213) 576-6662 or via email at vcuevas@waterboards.ca.gov or her supervisor, Blythe Ponek-Bacharowski at (213) 576-6720 or via email at bponek@waterboards.ca.gov.

K. Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

TABLE R1
Reasonable Potential Analysis and Limit Derivation

Newhall Ranch Sanitation District - Newhall Ranch WRP
(Receiving Water Data only, No POTW Data Avail.)
(CA0064556, C#9322)

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)										HUMAN HEALTH CALCULATIONS			
					Freshwater		Human Health			Title 22 GWR											Organisms Only		
					C acute = CMC tot	C chronic = CCC tot	Not applicable C hh W&O	C hh O			Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B at NR1	B at NR3	Tier 2 - Need limit?	Tier 3 - other info. ?	Tier 3 - need limit?	AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh		
1	Antimony	µg/L		Not available	NONE	NONE	14	4300	6	6	Not available	Go to Tier 2	1.4	1.3	Go to tier 3	YES	Similar facility			2.01			
2	Arsenic	µg/L		Not available	340	150	NONE	NONE	10 (Federal MCL)	10	Not available	Go to Tier 2	3.6	4.5	NO	YES	Similar Facility			2.01			
3	Beryllium	µg/L		Not available	NONE	NONE	Narrative	Narrative	4	4	Not available	Go to Tier 2	0.4	0.5	Go to tier 3	NO	NO						
4	Cadmium*	µg/L		Not available	18.6	6.6	Narrative	Narrative	.5	5	Not available	Go to Tier 2	0.69	1.73	Go to tier 3	NO	NO	NA			NA		
5a	Chromium III*	µg/L		Not available	4844	577	Narrative	Narrative		577	Not available	Go to Tier 2			Go to tier 3	NO	NO						
5b	Chromium VI	µg/L		Not available	16.3	11.4	Narrative	Narrative	50	11	Not available	Go to Tier 2	7.6	9.6	NO	NO	N/A			2.01	N/A		
6	Copper*	µg/L	0.6	Not available	45	27	1300	NONE		27	Not available	Go to Tier 2	11	15	No	Yes, may contribute to exceed ance	Yes	N/A			2.01	N/A	
7	Lead*	µg/L	0.6	Not available	402	16	Narrative	Narrative		16	Not available	Go to Tier 2	4.6	5.8	No	Yes, may contrib ute to exceed ance	YES						
8	Mercury	µg/L	0.6	Not available	Reserved	Reserved	0.05	0.051	2	0.051	Not available	Go to Tier 2	0.31	<0.01	YES			0.051	2.01	0.10251			
9	Nickel*	µg/L		Not available	1353	150	610	4600	100	100	Not available	Go to Tier 2	12	17	Go to tier 3	YES	Similar Facility						
10	Selenium	µg/L	0.6	Not available	Reserved	5	Narrative	Narrative	50	5	Not available	Go to Tier 2	4.4	6.2	YES			NA		2.01	NA		
11	Silver*	µg/L		Not available	35	none	NONE	NONE		35	Not available	Go to Tier 2	0.8	0.5	Go to tier 3	NO	NO						
12	Thallium	µg/L		Not available	NONE	NONE	1.7	6.3	2	2	Not available	Go to Tier 2	0.5	<0.2	Go to tier 3	NO	NO						
13	Zinc*	µg/L	0.6	Not available	346	346	none	NONE		346	Not available	Go to Tier 2	30	51	NO	YES	Similar facility			2.01	NA		
14	Cyanide	µg/L	0.6	Not available	22	5.2	700	220,000	200	5.2	Not available	Go to Tier 2	<5	<5	NO	YES	Similar facility						
18	Acrylonitrile	µg/L	0.6	Not available	NONE	NONE	0.059	0.66		0.66	Not available	Go to Tier 2	<10	<10	Go to tier 3	YES	Similar facility		0.66	2.01	1.3266		
38	Tetrachloroethylene	µg/L	0.6	Not available	NONE	NONE	0.8	8.85	5	5	Not available	Go to Tier 2	<0.5	<0.5	NO	YES	Similar facility						
68	Bis(2-Ethylhexyl) Phthalate	µg/L	0.6	Not available	NONE	NONE	1.8	5.9	4	4	Not available	Go to Tier 2	<2	<2	NO	YES	Similar facility		5.9	2.83		17	

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CTR#	DATE	Units	AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOSED LIMITS		Recommendation
			Freshwater				Freshwater							
			ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aqlife	Lowest AMEL	Lowest MDEL	
	1 Antimony	µg/L										6	--	Need Limit Tier 3 - Similar facility
	2 Arsenic	µg/L	0.321	109.14	0.527	79.05	79.05	1.55	122.528	3.11	245.85	10	--	Need Limit Tier 3 - Similar facility
	3 Beryllium	µg/L										--	--	Interim Monitoring - No CTR-based Limit
	4 Cadmium*	µg/L										--	--	Interim Monitoring - No CTR-based Limit
5a	Chromium III*	µg/L										--	--	Interim Monitoring - No CTR-based Limit
5b	Chromium VI	µg/L										--	--	Interim Monitoring - No CTR-based Limit
	6 Copper*	µg/L	0.321	14.445	0.527	14.229	14.229	1.55	22.055	3.11	44.252	22	44	Need Limit. RP to exceed the CTR Freshwater Aquatic life criteria.
	7 Lead*	µg/L	0.321	129.042	0.527	8.432	8.432	1.55	13.0696	3.11	26.224	13	26	Need limit. RP to exceed the CTR Freshwater Aquatic life criteria.
	8 Mercury	µg/L	0.321	NA	0.527	NA	NA	1.55	NA	3.11	NA	0.051	0.1	Need Limit. RP to exceed the CTR Human Health Organisms only criteria.
	9 Nickel*	µg/L										100	--	Need Limit Tier 3 - Similar facility
	10 Selenium	µg/L	0.321	#VALUE!	0.527	2.635	2.635	1.55	4.08425	3.11	8.1949	4.1	8.2	Need Limit. RP to exceed the CTR Freshwater Aquatic Life Criteria.
	11 Silver*	µg/L										--	--	No new limit, because there was no RP to exceed the CTR criteria.
	12 Thallium	µg/L										--	--	No new limit, because there was no RP to exceed the CTR criteria.
	13 Zinc*	µg/L										5000.0	--	Need Limit Tier 3 - Similar facility
	14 Cyanide	µg/L	0.321	7.062	0.527	2.7404	2.7404	1.55	4.24762	3.11	8.5226	4.2	8.5	Need Limit Tier 3 - Similar facility
	18 Acrylonitrile	µg/L										0.66	1.3	Need Limit Tier 3 - Similar facility
	38 Tetrachloroethylene	µg/L										5.0	--	Need Limit Tier 3 - Similar facility
	68 Bis(2-Ethylhexyl) Phthalate	µg/L										4.0	--	Need Limit Tier 3 - Similar facility

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(CA0064556, CI#9322)

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)								HUMAN HEALTH CALCULATIONS		
					Freshwater		Human Health											Organisms Only		
					C acute = CMC tot	C chronic = CCC tot	Not applicable C hh W&O	C hh O		Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B at NR1	B at NR3	Tier 2 - Need limit?	Tier 3 - other info. ?	Tier 3 - need limit?	AMELhh = ECA = C hh O	MDEL/ AMEL multiplier
77	1,4-Dichlorobenzene	µg/L	0.6	Not available	NONE	NONE	400	2,600	5	5	Not available	Go to Tier 2	<2	<2	Go to tier 3	YES	Similar facility			
105	gamma-BHC (aka Lindane)	µg/L	0.6	Not available	0.95	NONE	0.019	0.063	0.2	0.063	Not available	Go to Tier 2	<0.001	<0.001	NO	YES	Similar facility			
109	4,4'-DDE	µg/L	0.6	Not available	NONE	NONE	0.00059	0.00059		0.00059	Not available	Go to Tier 2	<0.001	0.011	YES			0.00059	2.01	0.0012
126	Toxaphene	µg/L	0.6	Not available	0.73	0.0002	0.0073	0.00075	3	0.00075	Not available	Go to Tier 2	<0.2		Go to tier 3	NO	NO			
	Iron	µg/L	0.6						300	300			10,000	13,800						
FOOTNOTE:																				
*	These metals are hardness dependent. CTR criteria was calculated using a minimum receiving water hardness of 350 mg/L at station NR1. Individual hardness values were capped at 400 mg/L, pursuant to CTR.																			

TABLE R1
Reasonable Potential Analysis and Limit Derivation

Newhall Ranch Sanitation District - Newhall Ranch WRP
 (Receiving Water Data only, No POTW Data Avail.)
 (CA0064556, CH#9322)

CTR#	DATE	Units	AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOSED LIMITS		Recommendation
			Freshwater					Freshwater						
			ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aqlife	Lowest AMEL	Lowest MDEL	
77	1,4-Dichlorobenzene	µg/L										5	—	Need Limit Tier 3 - Similar facility
105	gamma-BHC (aka Lindane)	µg/L										0.2	—	Need Limit Tier 3 - Similar facility
109	4,4'-DDE	µg/L										0.00059	0.0012	Need Limit - RP to exceed CTR Human Health criteria
126	Toxaphene	µg/L										—	—	Interim Monitoring - No Limit
	Iron	µg/L										300	—	Need Limit RP to exceed MCL Basin Plan WQO
FOOTNOTE:														
*	These metals are hardness dependent. CTR criteria was calculated using a minimum receiving water hardness of 350 mg/L at station NR1. Individual hardness values were capped at 400 mg/L, pursuant to CTR.													

ATTACHMENT G

GENERIC TOXICITY REDUCTION EVALUATION (TRE) WORKPLAN POTW

1. Information and Data Acquisition

a. Operations and performance review

- i. NPDES permit requirements
 - (1) Effluent limitations
 - (2) Special conditions
 - (3) Monitoring data and compliance history
- ii. POTW design criteria
 - (1) Hydraulic loading capacities
 - (2) Pollutant loading capacities
 - (3) Biodegradation kinetics calculations/assumptions
- iii. Influent and effluent conventional pollutant data
 - (1) Biochemical oxygen demand (BOD₅)
 - (2) Chemical oxygen demand (COD)
 - (3) Suspended solids (SS)
 - (4) Ammonia
 - (5) Residual chlorine
 - (6) pH
- iv. Process control data
 - (1) Primary sedimentation - hydraulic loading capacity and BOD and SS removal
 - (2) Activated sludge - Food-to-microorganism (F/M) ratio, mean cell residence time (MCRT), mixed liquor suspended solids (MLSS), sludge yield, and BOD and COD removal
 - (3) Secondary clarification - hydraulic and solids loading capacity, sludge volume index and sludge blanket depth
- v. Operations information
 - (1) Operating logs
 - (2) Standard operating procedures
 - (3) Operations and maintenance practices
- vi. Process sidestream characterization data
 - (1) Sludge processing sidestreams
 - (2) Tertiary filter backwash
 - (3) Cooling water
- vii. Combined sewer overflow (CSO) bypass data
 - (1) Frequency
 - (2) Volume
- viii. Chemical coagulant usage for wastewater treatment and sludge processing
 - (1) Polymer
 - (2) Ferric chloride
 - (3) Alum

- b. POTW influent and effluent characterization data**
 - i. Toxicity
 - ii. Priority pollutants
 - iii. Hazardous pollutants
 - iv. SARA 313 pollutants,
 - v. Other chemical-specific monitoring results
- c. Sewage residuals (raw, digested, thickened and dewatered sludge and incinerator ash) characterization data**
 - i. EP toxicity
 - ii. Toxicity Characteristic Leaching Procedure (TCLP)
 - iii. Chemical analysis
- d. Industrial waste survey (IWS)**
 - i. Information on IUs with categorical standards or local limits and other significant non-categorical IUs
 - ii. Number of IUs
 - iii. Discharge flow
 - iv. Standard Industrial Classification (SIC) code
 - v. Wastewater flow
 - (1) Types and concentrations of pollutants in the discharge
 - (2) Products manufactured
 - vi. Description of pretreatment facilities and operating practices
 - vii. Annual pretreatment report
 - viii. Schematic of sewer collection system
 - ix. POTW monitoring data
 - (1) Discharge characterization data
 - (2) Spill prevention and control procedures
 - (3) Hazardous waste generation
 - x. IU self-monitoring data
 - (1) Description of operations
 - (2) Flow measurements
 - (3) Discharge characterization data
 - (4) Notice of sludge loading
 - (5) Compliance schedule (if out of compliance)
 - xi. Technically based local limits compliance reports
 - xii. Waste hauler monitoring data manifests
 - xiii. Evidence of POTW treatment interferences (i.e., biological process inhibition)

ATTACHMENT H

SECTION A: STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS¹

1. Implementation Schedule

A storm water pollution prevention plan (SWPPP) shall be developed and implemented for this facility in accordance with the following schedule.

- a. Facility operators beginning industrial activities before October 1, 1992 shall develop and implement the SWPPP no later than October 1, 1992. Facility operators beginning industrial activities after October 1, 1992 shall develop and implement the SWPPP when industrial activities begin.
- b. Existing facility operators that submitted a Notice of Intent (NOI), pursuant to State Water Resources Control Board (State Water Board) Order No. 91-013-DWQ (as amended by Order No. 92-12) or San Francisco Bay Regional Water Quality Control Board (Regional Water Board) Order No. 92-11 (as amended by Order No. 92-116), shall continue to implement their existing SWPPP and shall implement any necessary revisions to their SWPPP in a timely manner, but in no case later than August 1, 1997.

2. Objectives

The SWPPP has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility; and (b) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. BMPs may include a variety of pollution prevention measures or other low-cost and pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, overhead coverage.) To achieve these objectives, facility operators should consider the five phase process for SWPPP development and implementation as shown in Table A.

The SWPPP requirements are designed to be sufficiently flexible to meet the needs of various facilities. SWPPP requirements that are not applicable to a facility should not be included in the SWPPP.

A facility's SWPPP is a written document that shall contain a compliance activity schedule, a description of industrial activities and pollutant sources, descriptions of BMPs, drawings, maps, and relevant copies or references of parts of other plans.

¹ From State Water Board's Water Quality Order No. 97-03-DWQ (NPDES General Permit No. CAS000001), *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*.

The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Water Board inspectors.

3. Planning and Organization

a. Pollution Prevention Team

The SWPPP shall identify a specific individual or individuals and their positions within the facility organization as members of a storm water pollution prevention team responsible for developing the SWPPP, assisting the facility manager in SWPPP implementation and revision, and conducting all monitoring program activities required in Section B of this General Permit. The SWPPP shall clearly identify the General Permit related responsibilities, duties, and activities of each team member. For small facilities, storm water pollution prevention teams may consist of one individual where appropriate.

b. Review Other Requirements and Existing Facility Plans

The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. Facility operators should review all local, State, and Federal requirements that impact, complement, or are consistent with the requirements of this General Permit. Facility operators should identify any existing facility plans that contain storm water pollutant control measures or relate to the requirements of this General Permit. As examples, facility operators whose facilities are subject to Federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials. Similarly, facility operators whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

4. Site Map

The SWPPP shall include a site map. The site map shall be provided on an 8-½ x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, facility operators may provide the required information on multiple site maps.

TABLE A
FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL
STORM WATER POLLUTION PREVENTION PLANS

PLANNING AND ORGANIZATION

Form Pollution Prevention Team
Review other plans

ASSESSMENT PHASE

Develop a site map
Identify potential pollutant sources
Inventory of materials and chemicals
List significant spills and leaks
Identify non-storm water discharges
Assess pollutant Risks

BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE

Non-structural BMPs
Structural BMPs
Select activity and site-specific BMPs

IMPLEMENTATION PHASE

Train employees
Implement BMPs
Conduct recordkeeping and reporting

EVALUATION / MONITORING

Conduct annual site evaluation
Review monitoring information
Evaluate BMPs
Review and revise SWPPP

The following information shall be included on the site map:

- a. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, and ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.
- b. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.
- c. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.
- d. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section A.6.a.iv. below have occurred.
- e. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

5. List of Significant Materials

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

6. Description of Potential Pollutant Sources

- a. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section A.4.e above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:

i. Industrial Processes

Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

ii. Material Handling and Storage Areas

Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

iii. Dust and Particulate Generating Activities

Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.

iv. Significant Spills and Leaks

Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges since April 17, 1994. Include toxic chemicals (listed in 40 CFR, Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (U.S. EPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 Code of Federal Regulations [CFR], Parts 110, 117, and 302).

The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken to ensure spill or leaks do not reoccur. Such list shall be updated as appropriate during the term of this General Permit.

v. Non-Storm Water Discharges

Facility operators shall investigate the facility to identify all non-storm water discharges and their sources. As part of this investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area.

Non-storm water discharges that contain significant quantities of pollutants or that do not meet the conditions provided in Special Conditions D. are prohibited by this General Permit (Examples of prohibited non-storm water discharges are contact and non-contact cooling water, boiler blowdown, rinse water, wash water, etc.). Non-storm water discharges that meet the conditions provided in Special Condition D. are authorized by this General Permit. The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

vi. Soil Erosion

Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.

- b. The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and potential pollutants. This information should be summarized similar to Table B. The last column of Table B, "Control Practices", should be completed in accordance with Section A.8. below.

7. Assessment of Potential Pollutant Sources

- a. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in A.6. above to determine:
- i. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and
 - ii. Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. Facility operators shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.
- b. Facility operators shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be

present in storm water discharges and authorized non-storm water discharges.

Facility operators are required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in Section 8 below.

8. Storm Water Best Management Practices

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections A.6. and 7. above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

TABLE B
EXAMPLE

ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND CORRESPONDING BEST MANAGEMENT PRACTICES SUMMARY

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Vehicle & Equipment Fueling	Fueling	Spills and leaks during delivery. Spills caused by topping off fuel tanks. Hosing or washing down fuel oil fuel area. Leaking storage tanks. Rainfall running off fuel oil, and rainfall running onto and off fueling area.	fuel oil	Use spill and overflow protection. Minimize run-on of storm water into the fueling area. Cover fueling area. Use dry cleanup methods rather than hosing down area. Implement proper spill prevention control program. Implement adequate preventative maintenance program to preventive tank and line leaks. Inspect fueling areas regularly to detect problems before they occur. Train employees on proper fueling, cleanup, and spill response techniques.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness

of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

Facility operators shall consider the following BMPs for implementation at the facility:

a. Non-Structural BMPs

Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. Facility operators should consider all possible non-structural BMPs options before considering additional structural BMPs (see Section A.8.b. below). Below is a list of non-structural BMPs that should be considered:

i. Good Housekeeping

Good housekeeping generally consist of practical procedures to maintain a clean and orderly facility.

ii. Preventive Maintenance

Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.

iii. Spill Response

This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.

iv. Material Handling and Storage

This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.

v. Employee Training

This includes training of personnel who are responsible for (1) implementing activities identified in the SWPPP, (2) conducting inspections, sampling, and visual observations, and (3) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The

SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.

vi. Waste Handling/Recycling

This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

vii. Recordkeeping and Internal Reporting

This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.

viii. Erosion Control and Site Stabilization

This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.

ix. Inspections

This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPPs are made.

x. Quality Assurance

This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.

b. Structural BMPs

Where non-structural BMPs as identified in Section A.8.a. above are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:

i. Overhead Coverage

This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.

ii. Retention Ponds

This includes basins, ponds, surface impoundments, bermed areas, etc. that do not allow storm water to discharge from the facility.

iii. Control Devices

This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.

iv. Secondary Containment Structures

This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.

v. Treatment

This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc. that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

9. Annual Comprehensive Site Compliance Evaluation

The facility operator shall conduct one comprehensive site compliance evaluation (evaluation) in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

- a. A review of all visual observation records, inspection records, and sampling and analysis results.
- b. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.
- c. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.
- d. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in Section A.10.e, for implementing SWPPP revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that the facility operator is in compliance with this General Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this General Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions 9. and 10. of Section C. of this General Permit.

10. SWPPP General Requirements

- a. The SWPPP shall be retained on site and made available upon request of a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.
- b. The Regional Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this Section. As requested by the Regional Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.
- c. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.
- d. Other than as provided in Provisions B.11, B.12, and E.2 of the General Permit, the SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a facility operator determines that the SWPPP is in violation of any requirement(s) of this General Permit.
- e. When any part of the SWPPP is infeasible to implement by the deadlines specified in Provision E.2 or Sections A.1, A.9, A.10.c, and A.10.d of this General Permit due to proposed significant structural changes, the facility operator shall submit a report to the Regional Water Board prior to the applicable deadline that (i) describes the portion of the SWPPP that is infeasible to implement by the deadline, (ii) provides justification for a time extension, (iii) provides a schedule for completing and implementing that portion of the SWPPP, and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.
- f. The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

ATTACHMENT I BIOSOLIDS USE AND DISPOSAL REQUIREMENTS

1. All biosolids generated by the Discharger shall be reused or disposed of in compliance with the applicable portions of:
 - a. 40 CFR 503: for biosolids that are land applied, placed in surface disposal sites (dedicated land disposal sites or monofills), or incinerated; 40 CFR 503 Subpart B (land application) applies to biosolids placed on the land for the purpose of providing nutrients or conditioning the soil for crops or vegetation. 40 CFR 503 Subpart C (surface disposal) applies to biosolids placed on the land for the purpose of disposal.
 - b. 40 CFR 258: for biosolids disposed of in Municipal Solid Waste landfills.
 - c. 40 CFR 257: for all biosolids disposal practices not covered under 40 CFR 258 or 503.
2. The Discharger is responsible for assuring that all biosolids from its facility are used or disposed of in accordance with 40 CFR 503, whether the Discharger reuses or disposes of the biosolids itself or transfers them to another party for further treatment, reuse, or disposal. The Discharger is responsible for informing subsequent preparers, applicators, or disposers of the requirements they must meet under 40 CFR 503.
3. Duty to mitigate: The Discharger shall take all reasonable steps to prevent or minimize any biosolids use or disposal which may adversely impact human health or the environment.
4. No biosolids shall be allowed to enter wetland or other waters of the United States.
5. Biosolids treatment, storage, and use or disposal shall not contaminate groundwater.
6. Biosolids treatment, storage, and use or disposal shall not create a nuisance such as objectionable odors or flies.
7. The Discharger shall assure that haulers who transport biosolids off site for further treatment, storage, reuse, or disposal take all necessary measures to keep the biosolids contained.
8. If biosolids are stored for over two years from the time they are generated, the Discharger must ensure compliance with all the requirements for surface disposal under 40 CFR 503 Subpart C, or must submit a written request to EPA with the information in 503.20 (b), requesting permission for longer temporary storage.

9. Sewage sludge containing more than 50 mg/kg PCB's shall be disposed of in accordance with 40 CFR 761.
10. Any off-site biosolids treatment, storage, use or disposal site operated by the Discharger within Region 4 (Los Angeles Region of RWQCB) that is not subject to its own Waste Discharge Requirements shall have facilities adequate to divert surface runoff from the adjacent area, to protect the site boundaries from erosion, and to prevent any conditions that would cause drainage from the materials in the disposal site to escape from the site. Adequate protection is defined as protected from at least a 100-year storm and from the highest tidal stage that may occur.
11. Inspection and Entry: The Regional Board, USEPA or an authorized representative thereof, upon the presentation of credentials, shall be allowed by the Discharger, directly or through contractual arrangements with their biosolids management contractors, to:
 - a. enter upon all premises where biosolids are produced by the Discharger and all premises where Discharger biosolids are further treated, stored, used, or disposed, either by the Discharger or by another party to whom the Discharger transfers the biosolids for further treatment, storage, use, or disposal;
 - b. have access to and copy any records that must be kept under the conditions of this permit or of 40 CFR 503, by the Discharger or by another party to whom the Discharger transfers the biosolids for further treatment, storage, use, or disposal; and
 - c. inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in the production of biosolids and further treatment, storage, use, or disposal by the Discharger or by another party to whom the Discharger transfers the biosolids for further treatment, storage, use, or disposal.
12. Monitoring shall be conducted as follows:
 - a. Biosolids shall be tested for the metals required in section 503.16 (for land application) or 503.26 (for surface disposal), using the methods in "Test Methods for Evaluating Solids Waste, Physical/Chemical Methods" (SW-846), as required in 503.8(b)(4), at the following minimum frequencies:

<u>Volume (dry metric tons/year)</u>	<u>Frequency</u>
0 – 290	once per year
290 – 1500	once per quarter
1500 – 15000	once per 60 days
> 15000	once per month

For accumulated, previously untested biosolids, the Discharge~ shall develop a

representative sampling plan, which addresses the number and location of sampling points, and collect representative samples.

Test results shall be expressed in mg pollutant per kg biosolids on a 100% dry weight basis.

Biosolids to be land applied shall be tested for Organic-N, ammonium-N, and nitrate-N at the frequencies required above.

- b. Prior to land application, the Discharger shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 503.32. Prior to disposal in a surface disposal site, the Discharger shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day.
 - c. For biosolids that are land applied or placed in a surface disposal site, the Discharger shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction requirements in 503.33 (b).
 - d. Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the Regional Administrator) and Federal facilities with > 5 mgd influent flow shall sample biosolids for pollutants listed under Section 307 (a) of the Act (as required in the pretreatment section of the permit for POTWs with pretreatment programs.) Class 1 facilities and Federal Facilities with > 5 mgd influent flow shall test dioxins/dibenzofurans using a detection limit of < 1 pg/g during their next sampling period if they have not done so within the past 5 years and once per 5 years thereafter.
 - e. The biosolids shall be tested annually, or more frequently if necessary to determine hazardousness in accordance with California Law.
 - f. If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.
 - g. Biosolids placed in a municipal landfill shall be tested semi-annually by the Paint Filter Test (SW-846, Method 9095) to demonstrate that there are no free liquids.
13. The Discharger either directly or through contractual arrangements with their biosolids management contractors shall comply with the following 40 CFR 503 notification requirements:
- a. A reuse/disposal plan shall be submitted to EPA Region IX Coordinator and, in the absence of other state or regional reporting requirements, to the state permitting

agency, prior to the use or disposal of any biosolids from this facility to a new or previously unreported site. The plan shall be submitted by the land applier of the biosolids and shall include, a description and a topographic map of the proposed site(s) for reuse or disposal, names and addresses of the applier(s) and site owner(s), and a list of any state or local permits which must be obtained. For land application sites, the plan shall include a description of the crops or vegetation to be grown, proposed nitrogen loadings to be used for the crops, and a groundwater monitoring plan if one exists.

- b. If the Discharger biosolids do not meet 503.13 Table 3 metals concentration limits, the Discharger must require their land applier to contact the state permitting authority to determine whether bulk biosolids subject to the cumulative pollutant loading rates in 503.12(b)(2) have been applied to the site since July 20, 1993, and, if so, the cumulative amount of pollutants applied to date, and background concentration, if known. The Discharger shall then notify EPA Region IX Coordinator of this information.
 - c. For biosolids that are land applied, the Discharger shall notify the applier in writing of the nitrogen content of the biosolids, and the applier's requirements under 503, including the requirements that the applier certify that the requirement to obtain information in Subpart A, and that the management practices, site restrictions, and any applicable vector attraction reduction requirements Subpart D have been met. The Discharger shall require the applier to certify at the end of 38 months following application of Class B biosolids that those harvesting restrictions in effect for up to 38 months have been met.
 - d. If bulk biosolids are shipped to another State or to Indian Lands, the Discharger must send written notice prior to the initial application of bulk biosolids to the permitting authorities in the receiving State or Indian Land (the EPA Regional Office for the area and the State/Indian authorities).
 - e. Notification of 503 non-compliance: The Discharger shall require appliers of their biosolids to notify EPA Region 9 and their state permitting agency of any noncompliance within 24 hours if the non-compliance may seriously endanger health or the environment. For other instances of non-compliance, the Discharger shall require appliers of their biosolids to notify EPA Region 9 and their state permitting agency of the non-compliance in writing within 10 working days of becoming aware of the non-compliance.
14. The Discharger shall submit an annual biosolids report to EPA Region IX Biosolids Coordinator and the Los Angeles Regional Water Quality Control Board by February 19 of each year for the period covering the previous calendar year. The report shall include:
- a. The amount of biosolids generated that year, in dry metric tons, and the amount

accumulated from previous years.

- b. Results of all pollutant monitoring required in the Monitoring Section above.
 - c. Descriptions of pathogen reduction methods, and vector attraction reduction methods, as required in 503.17 and 503.27.
 - d. Results of any groundwater monitoring or certification by groundwater scientist that the placement of biosolids in a surface disposal site will not contaminate an aquifer.
 - e. Names and addresses of land appliers and surface disposal site operators, and volumes applied (dry metric tons).
 - f. Names and addresses of persons who received biosolids for storage, further treatment, disposal in a municipal waste landfill, or for other reuse/disposal methods not covered in 14.c, above, and volumes delivered to each.
15. The Discharger shall require all parties contracted to manage their biosolids to submit an annual biosolids report to EPA Region IX Biosolids Coordinator by February 19 of each year for the period covering the previous calendar year. The report shall include:
- a. Names and addresses of land appliers and surface disposal site operators, name, location (latitude/longitude), and size (hectares) of site(s), volumes applied/disposed (dry metric tons) and for land application, biosolids loading rates (metric tons per hectare), nitrogen loading rates (kg/ha), dates of applications, crops grown, dates of seeding and harvesting and certifications that the requirement to obtain information in 503.12(e)(2), management practices in 503.14 and site restrictions in 503.32(b)(5) have been met.

**Waste Discharge Requirements for the Newhall Ranch
Sanitation District (Newhall Ranch Water Reclamation Plant),
Discharge to the Santa Clara River, Order No. R4-2007-0046,
NPDES No. CA0064556**



California Regional Water Quality Control Board

Los Angeles Region



Linda S. Adams
Cal/EPA Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger
Governor

COMMUNITY

SEP 14 2007

DEVELOPMENT

September 11, 2007

Mr. Mark Subbotin
Senior Vice President
Newhall Land/Newhall Ranch Division
23823 Valencia Boulevard
Valencia, CA 91355

Dear Mr. Subbotin:

ADOPTED WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT – NEWHALL RANCH SANITATION DISTRICT, NEWHALL RANCH WATER RECLAMATION PLANT (NPDES NO. CA0064556, CI No. 9322)

Our letter dated August 6, 2007, transmitted revised tentative Waste Discharge Requirements for the discharge of treated municipal and industrial wastewater from the Newhall Ranch Water Reclamation Plant (WRP) into the Santa Clara River.

Pursuant to Division 7 of the California Water Code, this Regional Board at a public hearing held on September 6, 2007, reviewed the revised tentative requirements, considered all factors in the case, and adopted Order No. R4-2007-0046 (copies attached) relative to the Newhall Ranch WRP's waste discharge. Order No. R4-2007-0046 serves as your NPDES permit, for the Newhall Ranch WRP and expires on August 10, 2012. Section 13376 of the California Water Code requires that a complete application for a new permit must be filed at least 180 days before the expiration date.

The monitoring and reporting programs require you to implement the monitoring programs on the first of the month following the month of the effective date of the Order (i.e., on November 1, 2007). Your first monitoring report must be received in the Regional Board office by February 15, 2008, and will cover the November 2007 sampling period. If no discharge occurred, the report shall so state. Bioassessment annual monitoring is required to begin in the 2008 spring/summer period.

When submitting monitoring or technical reports to the Regional Board, as required by your "Monitoring and Reporting Program", please send them ATTN: Information Technology Unit and include a reference to "Compliance File No. 9322" for the Newhall Ranch WRP. This will assure that the reports are directed to the appropriate file and staff. Also, please do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

California Environmental Protection Agency



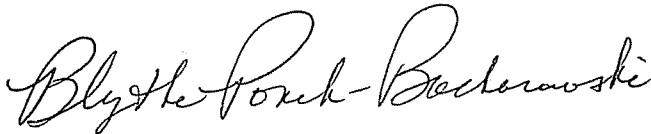
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Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

We are sending the final copy of Order No. R4-2007-0046 only to Newhall Land, to save printing and postage costs. For those on the mailing list, an electronic copy will be emailed to you.

If you have any questions, please contact Veronica Cuevas at (213) 576-6662 or call me at (213) 576-6720.

Sincerely,



Blythe Ponek-Bacharowski
Unit Chief, Municipal Permitting Unit (NPDES)

Enclosures

cc: Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
Jody Cook, U.S. Forest Service
U.S. Army Corps of Engineers
NOAA, National Marine Fisheries Service
Department of Interior, U.S. Fish and Wildlife Service
Mr. Philip Isorena, State Water Resources Control Board, Division of Water Quality
Mr. Michael Levy, State Water Resources Control Board, Office of Chief Counsel
Department of Fish and Game, Region 5
California State Parks and Recreation
Mr. Christopher Kroll, State Coastal Conservancy
Los Angeles County, DPW, Environmental Programs
Mr. Rod Kubumoto, Los Angeles County, DPW, Watershed Division
Los Angeles County, Department of Health Services
Heal the Bay
Environment Now
Santa Monica Baykeeper
Natural Resources Defense Council
Tim Malloy, UCLA School of Law
Ventura Coast Keeper
City of Santa Clarita
City of Valencia
Ms. Dana Wisehart, United Water Conservation District
Stephan C. Volker
Sierra Club, Los Angeles Chapter
Friends of the Santa Clara River

MAILING LIST (Cont.)

Mr. Steve Cole, Newhall Country Water District
Mr. Dennis Slivinski, County of Ventura
Mr. Gerald Johns, CA Department of Water Resources
Mr. Jeffrey M. Smith, Southern California Association of Governments
Russ Behrens, McCormick, Kidman & Behrens, LLP
Mr. Chris Stephens, Resource Management Agency County of Ventura
Mr. James Hartl, County of Los Angeles
Mr. Michael Murphy, City of Santa Clarita
Ms. Judy Reinsma, Santa Clarita Valley Well Owners Association
Sand Canyon Well Owners Association
Paul Fancett, Castaic Area Town Council
Paul Ash, Westranch Town Council
Santa Clarita Sierra Club
Santa Clarita Organization for Planning the Environment (SCOPE)
Jae Kim, Tetra Tech





THE REGIONAL PLANNING COMMISSION

County of Los Angeles

AGENDA

Meeting Place: Room 150 Hall of Records
320 W. Temple Street
Los Angeles, California 90012

Meeting Date: January 31, 2007 - Wednesday

Time: 9:00 a.m.

PART I - PLEDGE OF ALLEGIANCE

1. Commission

PART II - REPORTS

2. Approval of Agenda
3. Director
4. County Counsel

PART III - MINUTES FOR APPROVAL

5. January 10, 2007

PART IV - PUBLIC HEARING

Land Divisions

6. Vesting Tentative Tract Map No. 53108, (Ms. Tae)
General Plan Amendment/Local Plan Amendment/Specific
Plan Amendment Case Nos. 00-196-(5), Conditional Use Permit
Case Nos. 00-196-(5) and 2005-01121-(5), and Oak Tree Permit
Case No. 00-196-(5) - (Landmark Village)
Newhall Land and Farming Company
Within the Newhall Ranch Specific Plan, north of the Santa Clara River,
south of Highway 126, east of Ventura County boundary and west
of Interstate 5 Freeway
Newhall Zoned District

(Continued)

- Si no entiende este aviso o necesita mas informacion por favor llame este numero (213) 974-6466.
- If you require special accommodations or material in alternate format, please contact the ADA Coordinator Office, at (213) 974-6488 (Voice) or (213) 617-2292 (TDD), with at least three business day's notice.

*** Commission Office: (213) 974-6409 ***

The length of the Commission Agenda may necessitate that some items be heard in the afternoon after a lunch break.

THE REGIONAL PLANNING COMMISSION

PART IV - PUBLIC HEARING (Cont.)

Land Divisions

- a. General Plan Amendment Case No. 00-196-(5)
To amend the Los Angeles Countywide General Plan to remove "A" Street from the County Master Plan of Highways;
- b. Local Plan Amendment Case No. 00-196-(5)
To amend the Santa Clarita Valley Area Plan to remove "A" Street from the Circulation Plan;
- c. Specific Plan Amendment Case No. 00-196-(5)
To amend the Newhall Ranch Specific Plan to downgrade "A" Street from a Secondary Highway to a local collector street;
- d. Vesting Tentative Tract Map No. 53108
To create 415 lots consisting of 308 single-family lots, 20 multi-family lots (11 condominium lots with 282 detached condos, four condominium lots with 347 attached condos in 47 buildings, three apartment lots with 451 for-lease apartments in 28 buildings, and two condominium or lease-only lots with 56 units in nine buildings), 14 commercial lots with 15 for-lease buildings, 10 commercial lots with no development planned, 12 private driveway lots, three recreation lots, two park lots, one school lot, 25 open space lots and 20 open space/desilting basin lots on 292.6 acres;
- e. Conditional Use Permit Case No. 00-196-(5)
To ensure compliance with the requirements of development within a Significant Ecological Area/Special Management Area and onsite project grading;
- f. Conditional Use Permit Case No. 2005-01121-(5)
To ensure compliance with the requirements for offsite project grading and utilities, including water tanks; and
- g. Oak Tree Permit Case No. 00-196-(5)
To authorize removal of 67 oak trees (including 10 heritage oaks) and encroachment into the protected zone of 14 oak trees (including three heritage oaks).

THE REGIONAL PLANNING COMMISSION

PART V - CONTINUATION OF REPORTS

7. Commission/Counsel

PART VI - OTHER MATTERS

8. Public comment pursuant to Section 54954.3 of the Government Code.

ADJOURNMENT TO 6:30 P.M. MONDAY, FEBRUARY 5, 2007

TIME LIMITS: The Commission has established time limits with respect to receipt of testimony regarding matters on this Agenda. Applicants will be allowed fifteen (15) minutes to present testimony in support of their application, with an additional ten (10) minutes for responses to issues raised by other witnesses. Other proponents and opponents will be limited to three (3) minutes per speaker. Responses to questions from the Commission will not be included in these time limitations. All speakers are urged to refrain from repeating testimony presented by others. The Chair may impose different time limits, depending upon the length of the agenda, the number of speakers wishing to give testimony and/or the complexity of an agenda item.

WRITTEN TESTIMONY: Written testimony that is received prior to the public hearing will be made a part of the record and need not be read into the record.

PUBLIC HEARING CLOSING AND RE-OPENING: Public hearings that are closed during the course of the meeting may be re-opened by the Commission without notice at any time prior to adjournment of the meeting.

LOBBYIST REGISTRATION: Any person who seeks support or endorsement from the Regional Planning Commission on any official action may be subject to the provisions of Ordinance No. 93-0031, relating to lobbyists. Violation of the lobbyist ordinance may result in a fine and other penalties. FOR INFORMATION, CALL (213) 974-1093.

01/31/07

RPC MEETING DATE
January 31, 2007

AGENDA ITEM NO.
6 a, b, c, d, e, f, g

REGIONAL PLANNING COMMISSION TRANSMITTAL CHECKLIST

PROJECT NO: 00-196-(5)

CASE NO. Vesting Tentative Tract Map No. 53108
General Plan/Local Plan/Specific Plan Amendment
Case Nos. 00-196-(5)
Conditional Use Permit Case No. 00-196-(5)
Conditional Use Permit Case No. 2005-01121-(5)
Oak Tree Permit Case No. 00-196-(5)

CONTACT PERSON: Susan Tae

- ☒ STAFF REPORT
- ☒ DRAFT CONDITIONS
- ☒ BURDEN OF PROOF STATEMENT (Zoning or Plan Amendment Requests)
- ☐ ENVIRONMENTAL DOCUMENTATION - Previously submitted
- ☒ THOMAS BROTHERS MAP (Identifying Subject Property)
- ☒ LAND USE RADIUS MAP
- ☒ TENTATIVE TRACT MAP
- ☒ EXHIBIT "A" MAP
- ☒ PHOTOGRAPHS
- ☒ CORRESPONDENCE
- ☒ GIS-NET MAP
- ☒ APPLICANT: LANDMARK PLANNING NOTEBOOK, JAN 2007
- ☐ _____

Reviewed By: _____





Los Angeles County Department of Regional Planning
320 West Temple Street, Los Angeles, California 90012
Telephone (213) 974-6433

PROJECT No. 00-196-(5)
TRACT MAP NO. 53108
GPA/LPA/SPA 00-196-(5)
CUP 00-196-(5), 2005-01121-(5)
OTP 00-196-(5)

RPC MEETING DATE

CONTINUE TO

AGENDA ITEM
#6 a,b,c,d,e,f,g

PUBLIC HEARING DATE
January 31, 2007

APPLICANT Newhall Land and Farming		OWNER Newhall Land and Farming		REPRESENTATIVE Psomas	
REQUEST "Landmark Village" <u>Tentative Tract Map:</u> 415 lots consisting of 308 single-family, 20 multi-family (11 condominium lots with 282 detached condos, 4 condominium lots with 347 attached condos in 47 buildings, 3 apartment lots with 451 for-lease apartments in 28 buildings, and two condo or for lease lots with 56 units in nine buildings), 14 commercial with 15 for-lease buildings, 10 commercial with no development planned, 12 private driveway, 3 recreation, 2 park, 1 school, 25 open space and 20 open space/desilting basin lots on 292.6 acres <u>General/Local/Specific Plan Amendments:</u> To remove "A" Street from the County Master Plan of Highways and SCVAP Circulation Plan, and redesignate from a secondary highway to a local collector street <u>Conditional Use Permits:</u> To ensure compliance with the requirements of development within a Significant Ecological Area/Special Management Area, onsite project grading; and offsite project grading and utilities, including water tanks <u>Oak Tree Permit:</u> To authorize removal of 67 oak trees (including 10 heritage oaks) and encroachment within the protected zone of 14 oak trees (including three heritage oaks)					
LOCATION/ADDRESS North of the Santa Clara River, south of Highway 126, east of Ventura County boundary and west of Interstate 5 ("I-5") Freeway within Newhall Ranch Specific Plan ACCESS State Route ("SR") Highway 126			ZONED DISTRICT Newhall		
			COMMUNITY Newhall Ranch: Landmark Village		
			EXISTING ZONING SP (Specific Plan)		
SIZE 292.6 Gross Acres	EXISTING LAND USE Agricultural		SHAPE Irregular	TOPOGRAPHY Slight to steeply sloping	
SURROUNDING LAND USES & ZONING					
North: Single-family residences, water tank/City of Agoura Hills			East: Single-family residences, religious facility and vacant property/City of Agoura Hills		
South: Fire station, single-family residences and vacant property/A-1-20 (Light Agricultural-20 Ac Min Area), A-1-2, A-1-10, O-S (Open Space)			West: Single-family residences and vacant property/A-1-20 (Light Agricultural-20 Ac Min Area) and City of Agoura Hills		
GENERAL PLAN	DESIGNATION		MAXIMUM DENSITY	CONSISTENCY	
Newhall Ranch Specific Plan	Portions of RW-09, 27, 29, 30, 31, 32, 33, 34a, 34b, 35, 36, 37		1,444 DU	Yes	
ENVIRONMENTAL STATUS Draft Environmental Impact Report: Impacts that cannot be mitigated to less than significant include Biota, Visual Qualities, Noise, Air Quality, Solid Waste Disposal and Cumulative Agricultural Resources.					
DESCRIPTION OF SITE PLAN ("Landmark Village") The tentative map and exhibit "A" depict the residential and commercial mixed-use development. Residential types include single-family homes, detached and attached condominiums, apartments. Also proposed are for sale and lease-only commercial uses. Onsite project grading consists of 209,000 cubic yards of cut and 5,555,400 cubic yards of fill, with 5,346,400 cubic yards of import. Offsite grading will include Adobe Canyon (cut 6,969,000 cubic yards, fill 218,000 cubic yards, export 5,705,700 cubic yards) and Chiquito Canyon (cut 1,019,100 cubic yards, fill 666,300 cubic yards fill, no export). Open space consists of 20 acres with an additional 16-acre public park and an additional approximately 19 acres of open facility open space areas. A minimum 12-foot riding and hiking trail easement is provided along Santa Clara River with additional interpretive/nature trail boardwalk to be maintained by the development's homeowners' association.					
KEY ISSUES Public has requested that a continuance be granted for the public comment period to the Draft EIR; requests are for either an additional 30 or 60 days. Original public notice period was for 60 days, and extended once to coincide with the public hearing date (If more space is required, use opposite side)					

TO BE COMPLETED ONLY ON CASES TO BE HEARD BY THE BOARD OF SUPERVISORS

STAFF CONTACT PERSON		
RPC HEARING DATE (S)	RPC ACTION DATE	RPC RECOMMENDATION
MEMBERS VOTING AYE	MEMBERS VOTING NO	MEMBERS ABSTAINING
STAFF RECOMMENDATION (PRIOR TO HEARING) (O) = Opponents (F) = In Favor		
SPEAKERS* (O) (F)	PETITIONS (O) (F)	LETTERS (O) (F)

Project No. 00-196-(5)

COMMITTEE RECOMMENDATION (Subject to revision based on public hearing)

☐ APPROVAL☐ DENIAL☐ No improvements

____ 20 Acre Lots

____ 10 Acre Lots

____ 2½ Acre Lots

____ Sect 191.2

☒ Street improvements X Paving X Curbs and Gutters X Street Lights X Street Trees

____ Inverted Shoulder

 X Sidewalks

____ Off Site Paving ____ ft.

☒ Water Mains and Hydrants☒ Drainage Facilities☒ Sewer☐ Septic Tanks☐ Other _____☒ Park Dedication "In-Lieu Fee"

SPECIAL INDIVIDUAL DEPARTMENT CONCERNS

Engineer

Road

Flood

Forester & Fire Warden

Parks & Rec.

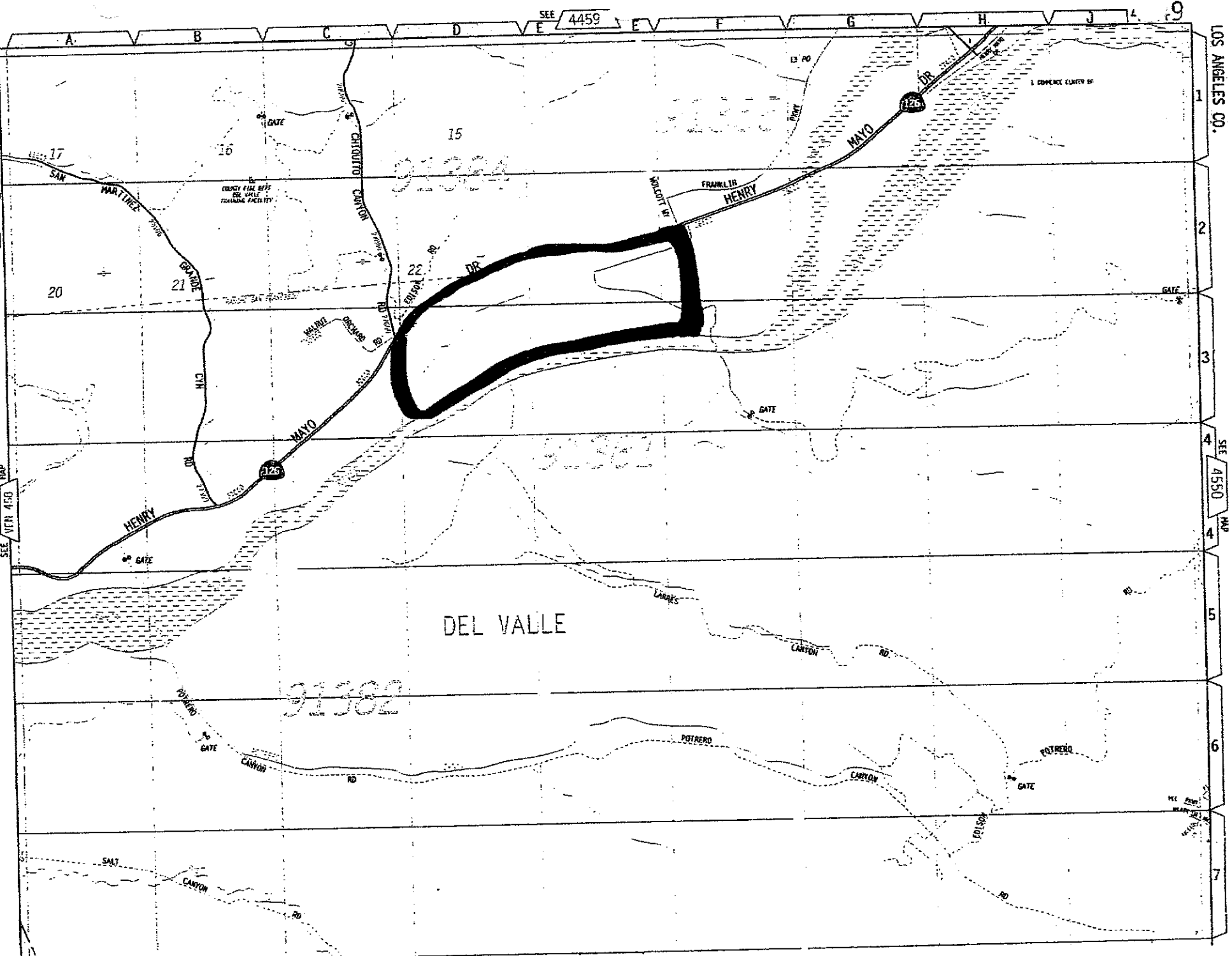
Health

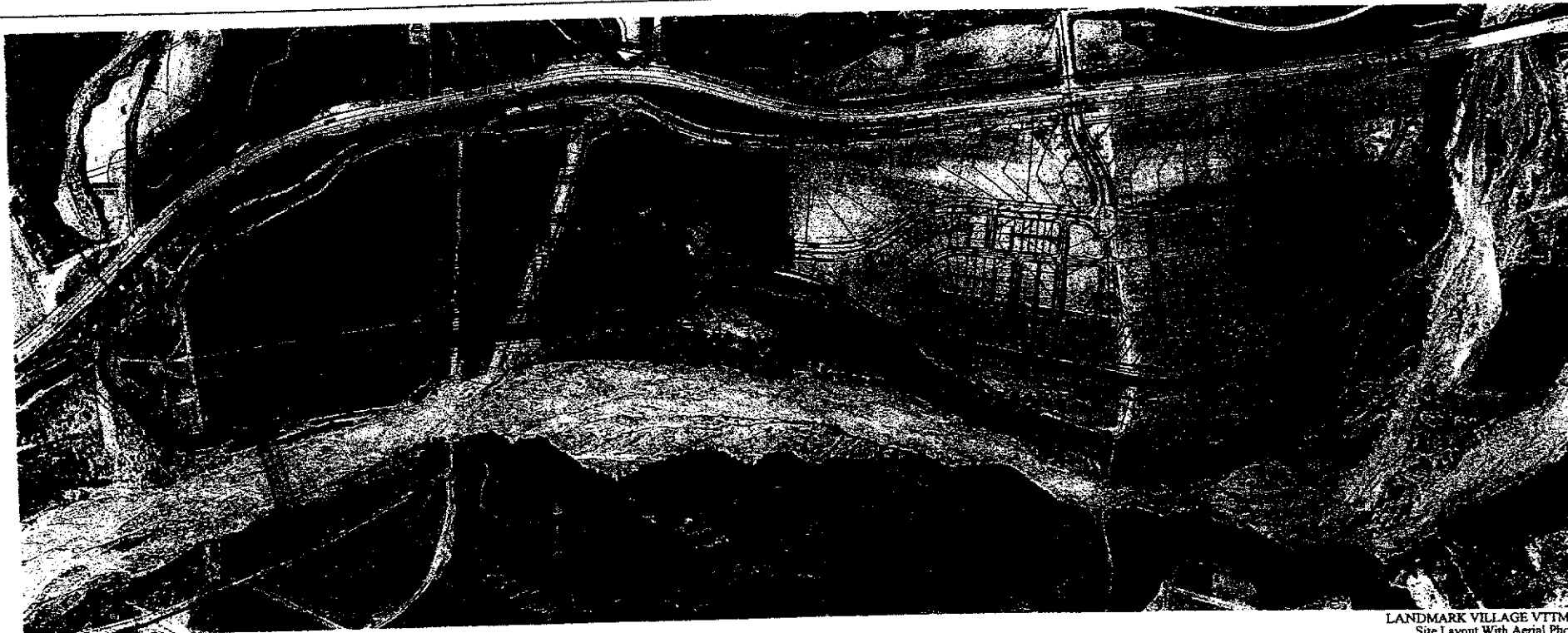
Planning

ISSUES AND ANALYSIS

The Draft EIR analyzes potentially significant impacts of the project, and concludes that impacts that cannot be mitigated to less than significant include Biota, Visual Qualities, Noise, Air Quality, Solid Waste Disposal and Cumulative Agricultural Resources.

Prepared by: Susan Tae





NEWHALL RANCH.



LANDMARK VILLAGE VTIM 53108

Site Layout With Aerial Photo

Exhibit

PSOMAS

DATE: 04-05-08

REVISED ON:

SHEET 1 OF 1

PHOTO-01

**PROJECT NO. 00-196-(5)
GENERAL PLAN AMENDMENT CASE NO. 00-196-(5)
LOCAL PLAN AMENDMENT CASE NO. 00-196-(5)
SPECIFIC PLAN AMENDMENT CASE NO. 00-196-(5)
VESTING TENTATIVE TRACT MAP NO. 53108
CONDITIONAL USE PERMIT CASE NO. 00-196-(5)
CONDITIONAL USE PERMIT CASE NO. 2005-01121-(5)
OAK TREE PERMIT CASE NO. 00-196-(5)**

**STAFF ANALYSIS
January 31, 2007 REGIONAL PLANNING COMMISSION PUBLIC HEARING**

PROJECT OVERVIEW

The applicant, Newhall Land and Farming Company, proposes a 291-acre master-planned neotraditional community development (known as Landmark Village) of a maximum 1,444 residential units and 1,033,000 square feet of nonresidential uses as well as 45 acres of open space, including a 16-acre community park, trail system, and elementary school. This project is within the "Riverwood" village of the adopted Newhall Ranch Specific Plan ("Specific Plan"). This project is the first within the boundaries of the Specific Plan, and located north of the Santa Clara River, south of State Route 126 ("SR-126"), east of the Ventura County boundary, and west of Interstate 5 Freeway.

The proposal requires amendments to the Los Angeles Countywide General Plan ("General Plan") and Santa Clarita Valley Area Plan ("Area Plan") to amend the Master Plan of Highways and Circulation Plan to eliminate "A" Street/Wolcott Road as a secondary highway, and amendment to the Specific Plan to downgrade "A" Street from a secondary highway to a local collector street. The project also requests approval of conditional use permits for compliance with requirements of development within a Significant Ecological Area/Special Management Area ("SEA/SMA"), onsite and offsite project grading and offsite utilities, including water tanks, and transport of materials. An oak tree permit is also required for removal of 67 oak trees (including 10 heritage oaks) and encroachment into the protected zone of 14 oak trees (including three heritage oaks). The applicant also requests a determination of substantial conformance related to shared parking, street widths, front yard setbacks and hillside resources. The Specific Plan includes a procedure for such determinations, and gives authority to the Director of the Los Angeles County Department of Regional Planning ("Planning Director") to refer to the Commission for public hearing. Such determinations for substantial conformance may apply to future projects within the Specific Plan boundary.

Access to the subject property is provided by SR-126, with internal access provided by "A" Street as a 'spine' road that provides 110 feet of right-of-way through most of the project. Connections from Highway 126 to "A" Street is provided by major highway Long Canyon Road to the west, and collector Wolcott Road to the east. The Long Canyon Road bridge is part of this project, and will span the Santa Clara River, approximately 1,100 feet in length and 100 feet in width. Two traffic circles, or 'roundabouts,' are also proposed on "A" Street within the development.

Major engineering features associated with the project include bank stabilization along the Santa Clara River and desilting basins and swales. Major offsite improvements include the creation of the utility corridor consisting of sewer trunklines to the future Newhall Ranch Water Reclamation Plan ("WRP") and existing Los Angeles County Sanitation District No. 32 WRP, and water mainline extensions; offsite debris basins and water tanks. Approximately 209,000 cubic yards of cut and approximately 5.5 million cubic yards of fill are proposed for the project, with net export from Adobe Canyon the south at 5,705,700 cubic yards. Offsite grading is also proposed at Chiquito Canyon,

GENERAL PLAN AMENDMENT CASE NO. 00-196-(5)
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SPECIFIC PLAN AMENDMENT CASE NO. 00-196-(5)
VESTING TENTATIVE TRACT MAP NO. 53108
CONDITIONAL USE PERMIT CASE NO. 00-196-(5)
CONDITIONAL USE PERMIT CASE NO. 2005-01121-(5)
OAK TREE PERMIT CASE NO. 00-196-(5)
Staff Report

north of SR-126, with approximately 1 million cubic yards of cut and 866,300 cubic yards of fill and no export.

The Draft Environmental Impact Report ("EIR"), which is a tiered document from the certified Specific Plan EIR, analyzes potentially significant impacts of the project, including Geology and Soils, Hydrology, Water Quality, Bioa, Floodplain Modifications, Visual Qualities, Traffic/Access, Noise, Air Quality, Water Resources, Wastewater Disposal, Solid Waste Disposal, Sheriff Services, Fire Services/Hazards, Education, Parks and Recreation, Libraries, Agricultural Resources, Utilities, Mineral Resources, Environmental Safety and Cultural/Paleontological Resources. Impacts that cannot be mitigated to less than significant include Biota, Visual Qualities, Noise, Air Quality, Solid Waste Disposal and Cumulative Agricultural Resources.

DESCRIPTION OF PROJECT PROPERTY

Location: The project site is located north of the Santa Clara River, south of SR-126, east of the Ventura County boundary, and west of Interstate 5 Freeway within the Specific Plan and in the Newhall Zoned District. The project is also surrounded by area within the Castaic Area Community Standards District, but is exempt from its provisions.

Physical Features: The subject property is approximately 292.6 acres in size, and consists of four parcels. The total project, including offsite improvements, is approximately 1,044 gross acres in size. The property is irregular in shape with slight to steeply sloping terrain in offsite areas where grading is proposed. The subject property is disturbed by historic and ongoing agricultural activity but contains existing sensitive biological resources and habitat types, including upland scrub habitat and sensitive riparian habitat. The project boundary also includes coastal sage chaparral scrub, live oak woodland, southern cottonwood willow riparian habitat; and wildlife habitat including horned lizards, sparrows, blackbirds, kites, hawks and plovers, jackrabbits, woodrats and mountain lion. The Santa Clara River, which within and south of the subdivision boundary, is also an SEA/SMA.

Access: SR-126 serves as primary access to the site, with connections provided by Long Canyon Road and Wolcott Road to "A" Street that provides main internal access. Numerous public street and private driveways also serve areas within the subdivision from "A" Street.

Services: Domestic water will be provided by Valencia Water Company. Reclaimed water will be provided by either the proposed Newhall Ranch WRP, if operational at the time Landmark Village will be occupied, or the existing Valencia WRP. Sanitary service will be provided by the Sanitation District via the Newhall Ranch WRP, or existing Valencia WRP if the Newhall WRP is not yet operational. Gas utilities will be provided by Southern California Gas Company, and electricity by Southern California Edison Company. The project is within the boundaries of the Castaic School District and the William S. Hart Union High School District. Shopping and employment exist nearby including the Valencia Commerce Center directly north and east of the project. Nearby recreation areas include Magic Mountain Amusement Park and Val Verde Regional Park as well as Castaic Lake Recreation Area.

GENERAL PLAN AMENDMENT CASE NO. 00-196-(5)
 LOCAL PLAN AMENDMENT CASE NO. 00-196-(5)
 SPECIFIC PLAN AMENDMENT CASE NO. 00-196-(5)
 VESTING TENTATIVE TRACT MAP NO. 53108
 CONDITIONAL USE PERMIT CASE NO. 00-196-(5)
 CONDITIONAL USE PERMIT CASE NO. 2005-01121-(5)
 OAK TREE PERMIT CASE NO. 00-196-(5)
 Staff Report

ENTITLEMENTS REQUESTED

General Plan Amendment: The applicant requests a General Plan Amendment to amend the County's Master Plan of Highways to remove "A" Street/Wolcott Road as a secondary highway as local collector streets are not shown.

Local Plan Amendment: The applicant requests to amend the Circulation Plan of the Area Plan to eliminate "A" Street/Wolcott Road as a secondary highway and redesignate as a local collector street.

Specific Plan Amendment: The applicant requests to amend the Specific Plan's Master Circulation Plan to change "A" Street/Wolcott Road from a secondary highway to a local collector street.

Vesting Tentative Tract Map: The applicant requests approval of a vesting tentative tract map to create 415 lots consisting of 308 single-family and 20 multi-family (11 condominium lots with 282 detached condos, 4 condominium lots with 347 attached condos in 47 buildings, 3 apartment lots with 451 for-lease apartments in 28 buildings, and two condo or for lease lots with 56 units in nine buildings) lots [total of 1,444 residential units], 14 commercial lots with 15 for-lease buildings, 10 commercial lots with no development planned (reserved as rail right-of-way), 12 private driveway lots, 3 recreation lots, 2 park lots, 1 school lot, 25 open space lots and 20 open space/desilting basin lots. The applicant requests unit phasing.

Conditional Use Permit: The applicant requests approval of conditional use permits ("CUP") to ensure compliance with the requirements of development within an SEA/SMA and onsite project grading; and offsite project grading and utilities, including water tanks, and transport of materials.

Oak Tree Permit: The applicant requests approval of an Oak Tree Permit to remove 67 oak trees (including 10 heritage oaks), and encroach into the protected zone of 14 oak trees (including three heritage oaks).

While not technically an entitlement, the applicant also requests a determination of substantial conformance with the Specific Plan for shared parking, street widths, front yard setbacks, and offsite transport of materials with conformance with grading and hillside management criteria. Section 5.2.2 of the Specific Plan contains procedures for making substantial conformance determinations, with authority lying with the Planning Director of the Los Angeles County Department of Regional Planning ("Regional Planning") and the Director of the Los Angeles County Department of Public Works ("Public Works"), with discretion by the Planning Director to refer to a public hearing. While this request for substantial conformance is associated with this project, such determinations for substantial conformance may apply to future projects within the Specific Plan boundary.

EXISTING ZONING

Subject Property: The subject property is zoned SP (Specific Plan).

GENERAL PLAN AMENDMENT CASE NO. 00-196-(5)
 LOCAL PLAN AMENDMENT CASE NO. 00-196-(5)
 SPECIFIC PLAN AMENDMENT CASE NO. 00-196-(5)
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 CONDITIONAL USE PERMIT CASE NO. 2005-01121-(5)
 OAK TREE PERMIT CASE NO. 00-196-(5)
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Surrounding Properties: Surrounding zoning is as follows:

North: SP, A-2-2 (Heavy Agricultural – Two Acre Minimum Required Lot Area), A-2-5 (Heavy Agricultural – Five Acre Minimum Required Lot Area), M-1-½ (Restricted Heavy Manufacturing);
 East: SP, A-2-5, M-1-½, P-R (Parking Restricted) and C-R (Commercial-Recreation);
 South: SP; and
 West: SP.

EXISTING LAND USES

Subject Property: The subject property is used for agricultural activity and related storage, and consists of four parcels from the previously approved Newhall Ranch Tentative Parcel Map No. 24500).

Surrounding Properties: Surrounding uses are as follows:

North: SR-126, vacant property, scattered single-family residences, Chiquita Canyon Landfill and business parks;
 East: Castaic Creek, RV park, and further east light industrial uses, agricultural land and Valencia WRP;
 South: Santa Clara River and vacant land; and
 West: Vacant property and agricultural land.

PREVIOUS CASE/ZONING HISTORY

The current SP zoning on the subject property became effective on June 26, 2003, following the adoption of Ordinance No. 2003-0031Z, which established Zone Change Case No. 94-087-(5). The zone change was associated with the Specific Plan.

The Specific Plan was adopted by the Los Angeles County Board of Supervisors ("Board") on May 27, 2003, along with a general and local (sub-plan) amendments, a conditional use permit and a tentative parcel map. The Specific Plan authorized the development of the approximately 11,963-acre property for 20,885 dwelling units with 423 second units; 629 acres of mixed use development (including 4,101 of the 20,885 units approved); 67 acres of commercial uses; 249 acres of business park land use; 37 acres of visitor-serving uses; 1,010 acres of open area (including 141 acres of community parks and 869 acres of other open areas); 5,159 acres within SMAs; 50 acres within 10 neighborhood parks; a 15-acre lake; public trail system; 18-hole golf course; two fire stations; one public library; one electrical substation; reservation of five elementary schools, one junior high school and one high school site; a 6.8-million gallon per day WRP; and other associated community facilities, such as roads and bridges.

The Specific Plan area is organized in five "villages," with the Landmark project within the "Riverwood" Village. Within the approximately 2,330 acres of Riverwood, 3,210 dwelling units and 234 second units were approved as well as 2,966,000 square feet of nonresidential square footage. The Santa Clara River is also a major Open Area feature within Riverwood.

GENERAL PLAN AMENDMENT CASE NO. 00-196-(5)
LOCAL PLAN AMENDMENT CASE NO. 00-196-(5)
SPECIFIC PLAN AMENDMENT CASE NO. 00-196-(5)
VESTING TENTATIVE TRACT MAP NO. 53108
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CONDITIONAL USE PERMIT CASE NO. 2005-01121-(5)
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A program-level EIR (and project-level for the Newhall WRP) was also certified with adoption of the Specific Plan, which had concluded that the project had significant unavoidable impacts to biological resources, agricultural resources, visual resources, air quality and solid waste disposal. In approving the project, the Board also adopted a Statement of Overriding Considerations that concluded that there were significant overriding public benefits with approval of the project. These included preservation of nearly 1,000 acres of the Santa Clara River and open areas; over 50 miles of trails including the Santa Clara River Trail; provision of improved parks, library and fire station which were 'above and beyond' mitigations required by CEQA; provision of 2,200 affordable homes; and preservation of the River Corridor to retain Santa Clara River's significant riparian vegetation and habitat.

PROJECT DESCRIPTION

Vesting Tentative Tract Map No. 53108 and Conditional Use Permit Case Nos. 00-196-(5) and 2005-01121-(5) Exhibit "A", dated November 7, 2005, depict a subdivision of 415 lots consisting of single-family, multi-family, commercial, recreation, park, school, open space and open space/public facility lots on 292.6 gross acres. The housing types range from single-family detached and attached homes as well as live-work units. Fourteen (14) commercial lots are also proposed with 15 for-lease buildings, 12 private driveway lots, three recreation lots, two park lots, and one school lot. Ten (10) commercial lots are also proposed with no development planned, and serve as reservation of future right-of-way for Metrolink. Twenty-five (25) open space lots as well as 20 open space/desilting basin lots are also depicted.

Residential

A range of housing types is provided in various clusters within the subdivision. Traditional single-family lots (i.e. one home on each lot) are clustered in three areas along the southern portion of the subdivision: to the west, across from the proposed elementary school, and to the east. These lots have been designed for garage access from the front, and by alley from the back; and range in size from minimum 3,200 square feet to 6,000 square feet.

Multi-family housing is also proposed both as for-lease apartments and for-sale condominiums, and generally in the northern portions of the subdivision and conceptual designs for site layout are depicted on the exhibit maps. Apartments, including 152 senior affordable rental units, are proposed in the western portion, just east of the office and retail center identified in the Specific Plan as the Village Center. Additional condominiums are proposed near the Village Center, north and south of "A" Street as well as north of "A" Street east of the elementary school and near Wolcott Road, with 144 single-family condo units reserved for moderate income (81 to 120 percent of the Los Angeles County median income, adjusted for family size) families between the elementary school and the commercial lots off of Wolcott Road. A total of 1,080 residential units are provided in 357 buildings.

A total of 1,388 dwelling units are provided within the residential lots.

Commercial

The Village Center, as described in the Specific Plan, is located east and west of Long Canyon Road on the western portion of the subdivision. Retail and office are anticipated, with an approximate

GENERAL PLAN AMENDMENT CASE NO. 00-196-(5)
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CONDITIONAL USE PERMIT CASE NO. 2005-01121-(5)
OAK TREE PERMIT CASE NO. 00-196-(5)
Staff Report

maximum of 1,795,450 square feet as well as 2,958 parking spaces based on estimates of office and retail use. Internal access within the Village Center is proposed by 28-foot wide drive aisles.

Commercial is also proposed near Wolcott Road with an approximate maximum of 762,450 square feet with 490 parking spaces and 26-foot wide drive aisles.

A total of 1,033,000 square feet of office and retail commercial is proposed as well as provision of 3,448 parking spaces for 15 buildings.

Commercial – No Development Planned

Ten (10) commercial lots are proposed with no development planned. These reflect future reservation of right-of-way for Metrolink, and are located just south of SR-126 along the northern subdivision boundary, and vary in width from 35 feet to 50 feet in width.

Mixed Use

Live/work units are proposed within Lot Nos. 334 and 335 for a total of 56 dwelling units and 255,608 square feet of nonresidential uses. One hundred twelve (112) parking spaces are also provided as part of the residential component along with 30 guest parking spaces.

The project totals a maximum of 1,444 dwelling units throughout the subdivision.

Elementary School

A nine-acre elementary school site (Lot No. 345) is depicted in the approximate center of the subdivision property, north of "A" Street, and with 157 parking spaces provided at one parking space per classroom. Actual site designs for the school are to be determined through design workshops with the school district. There is a potential for joint use with the adjacent public park.

Parks/Recreation/Open Space

Two park lots are depicted within the subdivision. North of "A" Street, a public park (Lot No. 344) is proposed with active recreation, and potential for joint use with the elementary school. A passive park (Lot No. 337), south of "A" Street, will be owned and maintained by the project's homeowners' association ("HOA"). The passive park will include connections to the Regional River Trail, a 12-foot wide trail that travels along the entire length of the Santa Clara River within this development, as well as drainage and water quality basins that can also serve as additional play areas. A private interpretive trail is also proposed with an outlook point towards the Santa Clara River.

Three private recreation lots (Lot Nos. 330, 336 and 340) are proposed, with proposed improvements with grass play area, swimming pool/tot lot and recreation buildings. A total of 103 onsite parking spaces is also depicted for all three recreation lots.

A total of 45 open space lots are provided, with 25 lots for open space and 20 lots for open space and desilting purposes. These open space lots are depicted along the northern and southern boundaries of the subdivision, adjacent to SR-126 and the Santa Clara River.

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Alternate Site Plans

Alternate site plans are depicted for two areas of the subdivision. One depicts a debris basin (Lot No. 409) where detached condominiums are proposed, off of "T" Drive north of "A" Street. The inclusion of the debris basin would result in a reduction of 20 condominium units.

The other alternate site plan is for Apartment/Condominium Lot No. 349, which depicts 20 additional units from 155 to 175 attached units, in nine buildings, with associated parking increase. Total parking provided, including guest parking, is 394 parking spaces with the 175-unit alternate.

Access and Roads

Long Canyon Road and Wolcott Road are the two points of connection from SR-126 with "A" Street as the main 'spine' collector road through the development. Long Canyon Road is a major highway, and provides at least 119 feet of right-of-way north of "A" Street with bike lanes in both directions of traffic as well as an eight-foot sidewalk and varying center planter widths. SR-126 is expected to be grade-separated (higher) than Long Canyon Road in the future, with the future interchange depicted as five northbound lanes (one left turn dedicated to SR-126, two for thru traffic under SR-126, and two for right turn traffic). Long Canyon Road also spans over the Santa Clara River as an 100-foot wide bridge to be constructed with this project. Wolcott Road is a secondary highway with 106 feet of right-of-way consisting of four travel lanes, a six-foot parkway and six-foot sidewalk on each side, and a 14-foot wide planter in the center. Wolcott Road is also depicted with a future interchange with SR-126. "A" Street is depicted as with a 110-foot wide right-of-way, with varying widths of improvements. At its widest improvements, which is from Long Canyon Road to 200 feet east of Long Canyon Road, seven travel lanes are provided with bike lane on one side, and four feet of parkway and six feet of sidewalk on both sides; no on-street parking would be provided. At its narrowest, two travel lanes with center lane is provided, along with bike lanes on each side, 10-foot-parkway and six-foot sidewalk on one side, and 24 foot-wide swale and eight-foot trail provided on the other side.

Private driveway lots are also proposed within the development, providing internal access in single-family and multi-family neighborhoods between the Village Center and the park/school, with widths ranging from 34 feet to 110 feet wide.

Other features of the local roads within the subdivision are curb extensions, which serve as traffic calming details by narrowing the road to promote slowing down traffic mid-block and at intersections. Roads are depicted at minimum 26 feet wide with mid-block lanes as narrow as 24 feet wide before combining to 62 feet wide.

Grading – Onsite and Offsite

Onsite grading consists of 209,000 cubic yards of cut and 5,555,400 cubic yards of fill.

Offsite project grading is proposed in mainly three locations: Adobe Canyon, Chiquito Canyon and the Santa Clara River. Adobe Canyon is located south of the subdivision on the south side of the Santa Clara River, and will serve as a borrow site for Landmark Village. From Adobe Canyon, approximately 5.7 million cubic yards of earthwork will be moved to Landmark through haul routes that coincide with existing agricultural roads. These are existing river crossings through Santa Clara River, which also crosses the SEA/SMA, which are currently permitted as operational agricultural river crossings permitted by the California Department of Fish and Game. Adobe Canyon is within the

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Specific Plan boundary and offsite transport of materials is one of the factors eligible for a determination of substantial conformance, and being considered as part of the proposal. This borrow site is also within the boundaries of a pending subdivision known as Heritage (Vesting Tentative Tract Map No. 060678) currently being reviewed by the Los Angeles County Subdivision Committee ("Subdivision Committee"), and once approved and developed, will not remain as the graded condition depicted for the borrow site.

The Chiquito Canyon grading site proposes approximately 1 million cubic yards of cut and approximately 866,000 cubic yards of fill with no export proposed. Two debris basins are also depicted within the Chiquito Canyon area. This is also within a pending subdivision within the Specific Plan boundary within Heritage, and depicted as a future business park within the Specific Plan.

Grading is also proposed outside the boundaries of the subdivision, and within the Santa Clara River, as part of the project's mitigation and habitat restoration. The dirt that will be removed from the Santa Clara River, will be placed onto the property and the new 'edge' of the Santa Clara River would be created with the bank stabilization efforts.

Other offsite Improvements

The project also proposes offsite installation of utility extensions, including water, sanitary sewer, gravity sewer, irrigation, cable, gas, fiber optics and reclaimed water lines. Described as a utility corridor, these lines will extend east to the Valencia WRP (Los Angeles County Sanitation District No. 32) southwest of the SR-126/I-5 interchange, and extend west to the proposed Newhall WRP. Utility lines were approved as part of the Newhall Ranch CUP to be hung from the Long Canyon bridge to provide potable water, reclaimed water, etc. to areas south, and now as part of this project is proposed to be buried under the Santa Clara River to provide permanent utility connections.

The project design has been reviewed by the Los Angeles County Subdivision Committee for technical feasibility and recommended project conditions are attached.

SPECIFIC PLAN CONSISTENCY

The Newhall Ranch Specific Plan was adopted by the Board on May 27, 2003 which authorized the development of the approximately 11,963-acre property for residential, mixed use, commercial business park, visitor-serving, open area, parks, trails, schools, library, fire stations and infrastructure including roads, bridges and a water reclamation plant. The Specific Plan locates the Landmark Village subdivision within its Riverwood Village, and identifies land uses within each Village with associated acreage, density and/or nonresidential square footage. The Specific Plan also includes exhibits for trails, circulation, resource management, drainage and water quality, water and sewer as well as its land use plan.

The applicant has provided a booklet, titled "Landmark Planning Notebook" ("Notebook") which staff will refer to in discussion of consistency. This Notebook provides the detailed exhibits and tables that update the Specific Plan within the Landmark subdivision boundary, and identify goals and objectives within the Specific Plan that these project features achieve.

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Affordable Housing (Notebook Section 1.7, Page 19)

The Specific Plan also requires affordable housing, with a total of 2,200 affordable units through the Specific Plan area (Specific Plan Section 3.10). These include housing units for Very Low Income households (of which 440 are reserved for seniors), Low Income Affordable, and Moderate Income Affordable; and may be rental, for-sale and any units supported by state, local or private affordable housing assistance. An affordable housing monitoring program is required as the tentative map with the 5,000th unit has already been filed with the County.

Landmark Village proposes 296 affordable units: 144 for-sale homes for moderate income households, and 152 for-rent units for very low income seniors. While the Specific Plan states a reservation of seniors 62 years or older, the definition of "senior citizen" as defined in Civil Code Section 51.3 defines as a person 62 years of age or older, or 55 years of age or older in a senior citizen housing development.

Circulation (Notebook Section 2.1, Pages 21-26)

The applicant has requested amendments to the General Plan and Area Plan as well as the Specific Plan to redesignate "A" Street/Wolcott Road as a local collector street rather than a secondary highway. Traffic studies were performed to indicate that the traffic volume can be accommodated with the main road as a collector, and regional circulation is still ensured despite this change.

"A" Street is depicted in illustrative terms on page 23 of the Notebook, and depict "A" Street with onstreet parking, bike lanes and trails along both sides of the street. Additional photo examples of other road features within Landmark are depicted on page 26 of the Notebook, including 'round points' or roundabouts, curb extensions and rear or alley access.

While the street cross-sections proposed for Landmark are different than what was approved by the Specific Plan, a determination of substantial conformance can be made (see section below for additional information) with respect to these street cross-section differences. These changes are intended to reduce design speed, eliminate cul-de-sacs, introduce traffic-calming features, reduce street widths at pedestrian crossings, and reduce curb cuts.

Trails (Notebook Section 2.2, Pages 27-28)

The Master Plan of Trails within the Specific Plan is general in nature, and detailed trail locations are identified on the subdivision tentative map. These include walkways and parkways along streets, paseos, community trails and the regional river trail, in a hierarchy of trail sizes and functionality. Access points are also identified from the project to the regional river trail system as well as locations for observation and interpretive nature points.

The regional river trail system is depicted in greater detail on the tentative map, and depict both an eight-foot wide County trail outside the subdivision boundary but on top of the bank stabilization, and a 16-foot wide riding and hiking trail that will also serve as the Los Angeles County Flood Control access road, and will be maintained by a Landscape Maintenance District ("LMD").

An interpretive trail is also depicted through private Recreation Lot No. 337 with a lookout point and interpretive nature station.

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Resource Management (Notebook Section 2.3, Pages 29-32)

The Specific Plan also identifies viewsheds as a significant resource, and a viewshed exhibit is provided that demonstrates how the subdivision as designed is compatible with the exhibits presented to the Commission as part of the Specific Plan public hearings.

The exhibit on page 30 identifies the viewsheds unaltered by the project, substantially altered by the project development and transportation improvements, and partially altered by the project. The areas substantially altered by development, depicted in purple as B, reflect the Village Center on the western side of the development, and the single-family and mixed use development off of Wolcott Road on the eastern side. By comparison, the original viewshed exhibit depicted on page 29 reflects a larger purple area, indicating that the current analysis depicts a smaller area extent of viewshed impacts than first presented.

Additional viewshed exhibits on pages 31 and 32 depict sound attenuation walls and plexiglass walls that will also affect the viewshed from SR-126, with illustrations are provided on page 32.

The Specific Plan also includes Design Guidelines (Specific Plan Section 4.2) requirements for design review and guidelines for development along SR-126. While specific development details are not available at this time, the project will be required to undergo review for compliance, including design of the community park and building elevation reviews adjacent to SR-126.

Drainage and Water Quality Plan (Notebook Section 2.4, Pages 33-36)

The Specific Plan Master Drainage Plan has been updated to reflect innovative methodologies to meet NPDES (National Pollutant Discharge Elimination System) requirements, and reflects a comprehensive system of flood control and desilting basins to maintain water quality standards.

Open space that also double as open facility basins, are located adjacent to the subdivision boundary and the Santa Clara River to the south, as well as along SR-126 to the north. Additional water quality features such as grass swales and depressed roundabouts, provide additional area for water retention (example photos provided on page 36).

Water Plan (Notebook Section 2.5, Page 37-38)

The Master Water Plan was designed in the Specific Plan for this portion with water main and reclaimed water lines along "A" Street. The Potable and Reclaimed Water Plan on page 38 depicts in greater detail, the infrastructure lines to serve the development. The water mains still run generally along "A" Street, with connections now to residential neighborhoods north and south of "A" Street.

A 2.7 million gallon water tank that is depicted on the Master Water Plan, is depicted within the Chiquito Canyon area. Water tanks are being proposed north of Landmark at Chiquito Canyon within the Valencia Commerce Center, and Round Mountain. The potable tanks are anticipated to be approximately 32 feet high and 152 feet in diameter, with a capacity of 4 million gallons. The reclaimed tanks are anticipated to be 32 feet high, and 132 feet in diameter with a capacity of 3 million gallons.

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Sewer Plan (Notebook Section 2.5, Pages 39-40)

The Master Sewer Plan also depicts sewer infrastructure anticipated, with the sewer line system connecting to the Newhall WRP. A detailed Sewer Plan was prepared for Landmark (page 40) that provides further refinement to the location of sewer main lines. Sewer service and connections is also proposed by two methods. Connection lines are proposed to extend east to the existing Valencia WRP near the SR-126/I-5 interchange if the Newhall WRP is not operational at the time Landmark requires connection. Eventual connection for the Landmark Village development will be the Newhall WRP, which is located further west. Connections for Landmark are shown with both options.

Land Use Plan (Notebook Section 3.1, Pages 41-44)

The Land Use Plan of the Specific Plan depicts development by various land uses, and within the Riverwood Village for this property, is designated for Low-Medium Density, Medium Density, Mixed Use and Commercial as well as River Corridor. As described on page 42, flexibility was built into the Specific Plan to allow for adjustments, transfers and conversions of use, boundaries, square footage, etc. (Specific Plan Section 5.2-5, beginning Page 5-14).

The project proposes conversions as well as boundary adjustments. The Medium Density was adjusted with reduction of 1.3 acres, and the adjacent Low-Medium Density area increased by 12.1 acres. The Commercial area was reduced by 4.2 acres, while 5.8 acres of the Low-Medium Density was converted to Mixed Use. All of these changes are described in a table format on page 44, with exhibits on pages 42 and 43, and reflect that these changes are within the 20 percent adjustment established by the Specific Plan.

The elementary school as well as the community park are part of land use overlays, and are 'flexible' within the Specific Plan with respect to location. The land use overlay adjustments are also permitted by Section 5.2-5 of the Specific Plan with respect to size, quantity and location of public service facilities like parks and schools.

The River Corridor allows for certain uses, with mitigation required as stated in Section 2.6-2 of the Specific Plan. These mitigation requirements include restoration as well as enhancement, and establish requirements for management of this area. Access to the SMA through hiking, equestrian and biking trails is permitted as limited to the trail system itself. Transition areas are also required from where development lies and the Santa Clara River, which is described in greater detail in Section 2.6-2.a.(3).(b), which provides standards for the design of these transition areas. These include provision of a trail between the River Corridor and development, ungrouted rock or buried bank stabilization where required to protect development areas, and minimum 100-foot buffers adjacent to the Santa Clara River. Uses permitted within this buffer include flood control access; sewer, water and utility easements; abutments; and trails and parks; all of which are subject to the CUP provisions for development in an SEA/SMA. Grading guidelines are also provided as well as a long-term management plan.

SUBSTANTIAL CONFORMANCE

Section 5.2-2 of the Specific Plan provides a process for making determinations of substantial conformance, with authority lying with the Planning Director and in some cases, the Director of Public

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Works. This section also provides the Planning Director with discretion to refer such substantial conformance to a Commission public hearing.

The applicant requests determinations of substantial conformance for shared parking, street widths, front yard setbacks, and offsite transport of materials with conformance with grading and hillside management criteria.

Shared Parking

Parking is discussed in Section 3.7 of the Specific Plan under Development Regulations. Section 3.7-3 also identified parking programs, where joint use or shared parking plans can be requested as part of a substantial conformance review. Such a program was intended to reduce the total number of parking spaces required, and provides findings for such determination.

However, the Specific Plan does not directly address offsite, reciprocal parking, where spaces for a particular use may be provided in the number required, but may not be located on the same parcel of land as the use, and therefore would not meet the County standards for parking provision.

The applicant requests that reciprocal, offsite parking be included within the Joint Use or Shared Parking Plan option provided in the Specific Plan, with same requirements for making findings at such time when the uses are determined and actual parking requirements calculated.

Street Widths

The applicant has also requested a determination of substantial conformance for alternative street sections to reflect the intent of the development to be neotraditional, where emphasis is on pedestrian traffic as opposed to automobile traffic. Features in these alternative street sections include traffic calming devices, like chokers, curb extensions, roundabouts, etc.

Such features have been much discussed with Public Works and the Los Angeles County Fire Department ("Fire Department") as well as Regional Planning to ensure that traffic capacity and life/safety issues are still addressed with these alternative street features. These are proposed on "A" Street and internal streets.

Front Yard Setbacks

Within the development regulations of the Specific Plan, setbacks for the garage face are provided at 18 feet. The intent is for cars that are parked in the driveway, not block the sidewalk or travel lanes of the street. However, the Specific Plan did not provide in much detail, front yard setbacks for homes where the garage is oriented for a side entrance, or located in the rear of the lot for alley entrance. In these cases, the applicant is requesting that a determination of substantial conformance be made that in these cases, a minimum front yard setback of 10 feet be maintained since driveways will be such that cars parked will not block the street as the intent of the 18-foot setback.

This is a determination of substantial conformance that could apply to all area within the Specific Plan boundary.

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Offsite Transport of Materials and Hillside Grading

The Landmark project also proposes offsite transport of materials from the Adobe Canyon borrow site to the Landmark subdivision site. This is proposed to raise the boundary to avoid flooding issues with proximity to the Santa Clara River, and would use two haul routes on an existing agricultural crossing.

Grading for subdivisions with slopes over 25 percent slope, are also required to be consistent with grading and hillside guidelines. The grading that is proposed both in the Adobe Canyon borrow site and Chiquito Canyon, are within areas of the Specific Plan where other development is proposed. Therefore, the grading that will result from that needed for Landmark, will be re-graded to accommodate that proposed for Homestead (TR 060678), a pending subdivision already filed and being reviewed by the County.

While this request for substantial conformance is associated with this project, such determinations for substantial conformance may apply to future projects within the Specific Plan boundary. Draft findings of substantial conformance as proposed by the applicant are attached.

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The applicant requests an amendment to the General Plan Master Plan of Highways to delete "A" Street/Wolcott Road as a secondary highway since local collector streets are not shown on this map, and amend the Area Plan Circulation Plan and the Specific Plan Master Circulation Plan to redesignate "A" Street from a secondary highway to a local collector. Based on additional traffic analyses done for Landmark, it was determined that the traffic capacity necessary to serve Landmark Village, can be accommodated using local collector standards as opposed to wider, secondary highway standards, while ensuring a functional regional circulation system.

Within the Specific Plan, the redesignation of "A" Street/Wolcott Road would be modified on the Specific Plan Mobility Plan, Master Circulation Plan and on the accompanying cross-sections.

The applicant must meet the following burden of proof required for a plan amendment:

- A. A need for the proposed General and Local Plan Amendment exists;
- B. The particular amendment proposed is approximate and proper;
- C. Modified conditions warrant a revision to the General Plan and Area Plan; and
- D. Approval of the proposed General Plan Amendment will be in the interest of public health, safety and general welfare and in conformity with good planning practices.

The applicant's Burden of Proof responses are attached.

CONDITIONAL USE PERMIT

Pursuant to Table 3.4-2 Footnote 16, and Section 5.2-3 of the Specific Plan, and Section 22.56.215 of the Los Angeles County Code ("County Code"), the applicant has requested a CUP, and submitted an

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Exhibit "A", to demonstrate compliance with requirements of development within a SEA, project grading (onsite and offsite), and offsite utilities, including water tanks.

Within the SEA/SMA, the project proposes the following improvements: Long Canyon Road bridge, trails and scenic vista points, bank stabilization, utilities, agricultural wells, riparian mitigation, and Metrolink right-of-way easements.

The Long Canyon Road bridge will cross the Santa Clara River, and is proposed to be 1,100 feet long and 100 feet wide. The bridge crossing itself was approved as part of the adoption of the Specific Plan, where the Board found that given various options for bridge alignments and bridge span alternatives, this was one of three bridge crossings that were approved.

In addition to the standard burden of proof required for a CUP, the applicant must also meet the following burdens of proof required for:

Development within an SEA:

- A. That the requested development is designed to be highly compatible with the biotic resources present, including the setting aside of appropriate and sufficient undisturbed areas; and
- B. That the requested development is designed to maintain water bodies, watercourses, and their tributaries in a natural state; and
- C. That the requested development is designed so that wildlife movement corridors (migratory paths) are left in an undisturbed and natural state; and
- D. That the requested development retains sufficient natural vegetative cover and/or open spaces to buffer critical resource areas from said requested development; and
- E. That where necessary, fences or walls are provided to buffer important habitat areas from development; and
- F. That roads and utilities serving the proposed development are located and designed so as not to conflict with critical resources, habitat areas or migratory paths.

The applicant's Burden of Proof responses are attached.

OAK TREE PERMIT

Pursuant to Section 22.56.2050 of the County Code, an oak tree report was submitted by Impact Sciences, Inc. Of the 201 oak trees associated with the project and subject to the Oak Tree ordinance as identified in the June 2006 and updated September 2006 report, 82 trees are included in the associated Oak Tree Permit.

Sixty-seven (67) oak trees, including 10 heritage oaks are proposed to be removed as part of onsite and offsite improvements. Fourteen (14) oak trees, including three heritage oaks are proposed to be encroached within its protected zone due to potential impacts from construction.

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Mitigation measures recommended by the County Forester/Fire Warden include replacement of oak tree removals at a rate of 2:1 (and 10:1 for heritage oaks) for a total of 214 mitigation trees. A contribution to the Los Angeles County Oak Forest Special Fund would also be required for any tree that dies within two years as a result of a permitted encroachment. The oak tree report also identified 26 trees which would be candidates for relocation within the Specific Plan boundaries.

Pursuant to Section 22.56.2100 of the County Code, the applicant must meet the following burden of proof:

- A. That the proposed construction of proposed use will be accomplished without endangering the health of the remaining trees subject to this Part 16, if any, on the subject property; and
- B. That the removal or relocation of the oak tree(s) proposed will not result in soil erosion through the diversion or increased flow of surface waters which cannot be satisfactorily mitigated; and
- C. That in addition to the above facts, at least one of the following findings apply:
 - 1. That the removal or relocation of the oak tree(s) proposed is necessary as continued existence at present location(s) frustrates the planned improvement or proposed use of the subject property to such an extent that:
 - a. Alternative development plans cannot achieve the same permitted density or that the cost of such alternative would be prohibitive, or
 - b. Placement of such tree(s) precludes the reasonable and efficient use of such property for a use otherwise authorized; or
 - 2. That the oak tree(s) proposed for removal or relocation interferes with utility services or streets and highways, either within or outside of the subject property, and no reasonable alternative to such interference exists other than removal of the tree(s); or
 - 3. That the condition of the oak tree(s) proposed for removal with reference to seriously debilitating disease or danger of falling is such that it cannot be remedied through reasonable preservation procedures and practices; and
- D. That the removal of the oak tree(s) proposed will not be contrary to or be in substantial conflict with the intent and purpose of the oak tree permit procedure.

The applicant's Burden of Proof responses are attached.

ENVIRONMENTAL DOCUMENTATION

The program-level Specific Plan EIR was certified along with adoption of the Specific Plan and a Statement of Overriding Considerations. The Board found that there were overriding public benefits, and included preservation of nearly 1,000 acres of the Santa Clara River and open areas; over 50 miles of trails including the Santa Clara River Trail; provision of improved parks, library and fire station which were 'above and beyond' mitigations required by CEQA; provision of 2,200 affordable homes; and preservation of the River Corridor to retain Santa Clara River's significant riparian vegetation and habitat. Within the Specific Plan EIR, six alternatives were discussed, and include project designs with reduction in 20, 39, and 68 percent of the development. While the development with 68-percent reduction was identified as the environmentally superior alternative, the Specific Plan was eventually

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adopted by the Board with a revised project and mitigation measures along with certification of the EIR.

In accordance with State and County CEQA guidelines, a project-level Draft EIR, which is tiered from the certified Specific Plan program EIR, was prepared for Landmark Village. The Draft EIR concludes that certain potentially significant impacts are less than significant with implementation of the proposed mitigation measures in the Mitigation Monitoring Program. However, the Draft EIR concludes that the project design and/or suggested conditions will result in certain significant impacts are unavoidable, and cannot be mitigated to less than significant. Copies of the Draft EIR were distributed to the Commission.

Identified potential impacts found to be less than significant with project mitigation, include:

- | | |
|--------------------------------------|---------------------------|
| ▪ Geology and Soils | ▪ Mineral Resources |
| ▪ Hydrology | ▪ Water Resources |
| ▪ Water Quality | ▪ Wastewater Disposal |
| ▪ Floodplain Modification | ▪ Sheriff Services |
| ▪ Traffic/Access | ▪ Fire Protection/Hazards |
| ▪ Environmental Safety | ▪ Education |
| ▪ Cultural/Paleontological Resources | ▪ Libraries |
| ▪ Utilities | ▪ Parks and Recreation |

Identified potentially impacts that cannot be mitigated to less than significant, and will result in significant residual and/or cumulative impacts, include:

- Biota
- Visual Quality
- Noise
- Agricultural Resources
- Solid Waste Disposal

Of these impacts that cannot be mitigated to less than significant, Noise is the only factor that was not previously identified and adopted with a Statement of Overriding Considerations as part of the certified Specific Plan program EIR. Noise impacts result from pile-driving of piers, the construction of the Long Canyon Road bridge, and potential impacts to future residents on Landmark Village if bridge construction begins after the subdivision is built and occupied.

Mitigation measures which have been incorporated into the project, and included in the Mitigation Monitoring Program ("MMP"), are listed in the Executive Summary of the Landmark Draft EIR, and include mitigation measures originally prescribed within the Specific Plan EIR.

Four alternatives to the Landmark project are also discussed in the Draft EIR as required by CEQA guidelines. These include: (1) No Project/No Development Alternative; (2) No Project/Future Development; (3) Floodplain Avoidance; and (4) Cluster Design. Each alternative is evaluated for potential impacts and the environmentally superior alternative is identified.

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Within this Draft EIR, the Cluster Alternative No. 4 (Draft EIR dated November 2006, Pages 5.0-20 through 5.0-35) is identified as the environmentally superior alternative. This alternative retains the overall layout of the proposed Landmark Village, except for 106 acres in the most western portion of the property that is to remain for agricultural uses. This would result in a reduction of 507 dwelling units along with 828,000 square feet of commercial space. This Alternative would retain the elementary school and 16-acre community park, and bank stabilization would still be required along the edge of the Santa Clara River. This project would result in the same factors impacted by development, and would increase the impact to water service and water quality.

The technical appendices include geological and geotechnical reports, an air quality analysis, drainage concept, biota report, sensitive plant report, spadefoot toad habitat monitoring report, water supply analysis, noise report, water quality reports, cultural resources assessment, Santa Clara river fluvial study, an archeological survey, and other technical documents supporting the Draft EIR.

The formal public review period for the Draft EIR was for a period of 60 days, from November 20, 2006 to January 22, 2007. A Notice of Public Review Period Time Continuation was also distributed, which extended the Draft EIR public review period up until January 31, 2007 at this time.

All written comments received prior to the close of the public hearing will be considered in the Final EIR. Copies of written correspondence on the Draft EIR, including requests for additional review time, are attached.

COUNTY DEPARTMENT AND AGENCY COMMENTS AND RECOMMENDATIONS

Subdivision Committee consists of the Departments of Regional Planning, Public Works, Fire, Parks and Recreation, and Public Health. The Subdivision Committee has reviewed the Tentative Tract and Exhibit "A" maps dated November 7, 2005, and recommends the attached conditions.

Comments and recommendations from County Departments and other agencies consulted during the environmental review process include the California Department of Fish and Game ("Fish and Game"), Regional Water Quality Control Board, Native American Heritage Commission, California Highway Patrol ("CHP"), California Department of Transportation ("Caltrans"), Southern California Association of Governments ("SCAG") as well as City of Santa Clarita and County of Ventura. Other agencies that have provided correspondence include the Castaic Lake Water Agency, Sierra Club, California Water Network, Santa Clarita Organization for Planning and the Environment (SCOPE), Piru Neighborhood Council and Friends of the Santa Clara River.

Most comments received indicate that due to the volume of material associated with this EIR, an additional 30 to 60 days is requested as part of the public review period. The EIR was circulated with an original public review period of 60 days, and has been extended once for an additional nine days to coincide with the Commission public hearing date.

Comments were received from Audobon California that state that insufficient bird surveys were done as part of the Draft EIR along with mischaracterizations of the status, range and impacts to bird species, and lack of specific mitigation measures for maximum feasible mitigation. Comments were

GENERAL PLAN AMENDMENT CASE NO. 00-196-(5)
 LOCAL PLAN AMENDMENT CASE NO. 00-196-(5)
 SPECIFIC PLAN AMENDMENT CASE NO. 00-196-(5)
 VESTING TENTATIVE TRACT MAP NO. 53108
 CONDITIONAL USE PERMIT CASE NO. 00-196-(5)
 CONDITIONAL USE PERMIT CASE NO. 2005-01121-(5)
 OAK TREE PERMIT CASE NO. 00-196-(5)
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also received from the SCAG indicating that the Draft EIR analysis is consistent with the Regional Comprehensive Plan and Guide (RCPG), as well as from CHP that indicate concerns with increased traffic flow where currently little development exists.

All comments received in response to the Draft EIR are attached and will be incorporated into the Final EIR.

LEGAL NOTIFICATION/COMMUNITY OUTREACH

Approximately five notices of public hearing were mailed to property owners within a 1,000-foot radius of the subject property as well as additional notices to those on the courtesy mailing list for projects in the Newhall and Castaic Canyon Zoned Districts. The public hearing notice was published in The Signal and La Opinion on November 20, 2006. The Draft EIR was available for review at the Newhall Library, Valencia Library and Canyon County Jo Anne Darcy Library beginning November 20, 2006. Project materials, including a tentative tract map, site plan, and recommended conditions, were received at the Newhall Library on December 29, 2006. One large public hearing notice, eight feet wide by four feet high, was posted on the subject property along SR-126 on December 29, 2006. Public hearing materials were also posted on the Department of Regional Planning's website.

The applicant has also presented the project on several occasions to the Castaic Area Town Council. Comments have not yet been received from the Castaic Area Town Council regarding the project.

CORRESPONDENCE RECEIVED BEFORE PUBLIC HEARING

Most correspondence received to date, comment on the Draft EIR and request additional time for review. Some comments have been received, and are discussed in summary detail above. Comments have been received in opposition to this project, with several references to the timing of this project with an Environmental Impact Statement (a federal environmental document) for the Santa Clara River. One letter has also been received in favor of the project, with desire expressed to live within this community once developed.

All correspondence received to date has been attached as part of this package.

STAFF EVALUATION

The Newhall Ranch Specific Plan was adopted by the Board on May 27, 2003 after numerous public hearings before the Commission and Board, and through public participation from many organizations and community groups as well as interested individuals and through changes as a result of litigation. Within its boundary, the Specific Plan itself is the comprehensive document to guide future development, with plans, development regulations, design guidelines and implementation procedures.

An EIR was prepared for the Specific Plan, which indicated that certain impacts could not be mitigated to less than significant, and with adoption of the Specific Plan, the Board also adopted a Statement of

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Overriding Considerations as there were overriding public benefits to approval of the project. These included that the project was designed to preserve over nine square miles, including the Santa Clara River; 'buried bank stabilization' as proposed by the City of Santa Clarita, has been incorporated into the project which is above and beyond the requirements of the County's General and Area Plan; the project uses 'livable community' concepts, including the mixed use category to combine commercial with residential and recreational, provide over 50 miles of pedestrian and bicycle trails, provide bus pull-ins, and a park-and-ride facility is planned; and new Water Reclamation Plant will be constructed.

The Specific Plan is adopted for a total maximum of 21,308 dwelling units as well as approximately 5.5 million square feet of nonresidential uses over 11,963.9 gross acres.

Landmark Village is the first subdivision within the Specific Plan, and proposes a maximum of 1,444 dwelling units and 1,033,000 square feet of nonresidential uses on 292 acres. The property proposes single-family, for sale and lease attached and detached multi-family units, mixed use, office and retail commercial, and open space, including trails, parks and neighborhood recreation areas. An elementary school is also proposed as well as fire station (not yet incorporated into the tentative map).

As an implementation tool of the Specific Plan, a subdivision is submitted and evaluated for compliance with the Title 21 of the County Code (Subdivision Ordinance) as well as the California Map Act. Subdivisions are also evaluated for consistency with the Specific Plan, including density within portions of the property, siting of streets and recreation, and parking as necessary to accommodate multi-family and commercial uses as well as other development standards.

In addition, the Specific Plan contains language for determinations of substantial conformance for changes, either approved, approved with conditions or denied, that based on whether it can be found that the request substantially conforms with all applicable provisions of the Specific Plan and County ordinances; will not adversely affect public health, safety and welfare; and will not adversely affect adjacent property. The project seeks determinations of substantial conformance related to offsite reciprocal parking, street widths, front yard setbacks, and offsite transport of materials with conformance with grading and hillside management criteria.

Adjustments to the land use designations are also permitted within the Specific Plan, including conversion of uses and adjustments of boundaries. The project proposes adjustment of the land use boundaries as well as conversion of Low-Medium Density to Mixed Use, which comply with the parameters for such adjustments and conversions as stated in the Specific Plan.

The project also proposed development with the SEA/SMA, the Santa Clara River, including grading, bank stabilization, haul routes, and Long Canyon Road bridge. Long Canyon Road bridge is one of the bridge crossings originally considered by the Board for the Specific Plan, and was approved as part of the Specific Plan in that location. Haul routes are proposed to use existing river crossings that are permitted by the Army Corps of Engineers for agricultural uses. Grading is proposed as habitat restoration as well as bank stabilization to revegetate with native vegetation. One hundred-foot buffers are required to be provided by the Specific Plan, and may include bank stabilization, water quality basins, trails and other public facility related uses.

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While the EIR concluded that not all impacts from Landmark Village can be mitigated to less than significant, all but one factor was already identified as part of the Specific Plan, and the project was approved with the Statement of Overriding Considerations.

Additional time was requested by many organizations to allow time to further evaluate the project. These included requests for approval timing with an evaluation of an EIS for the Santa Clara River itself.

FEES/DEPOSITS

If approved as recommended by staff, the following shall apply:

California Department of Fish and Game:

1. Processing fee of \$875.00 associated with the filing and posting of a Notice of Determination with the County Clerk, to defray the costs of fish and wildlife protection and management incurred by the California Department of Fish and Game.

Fire Department:

2. Cost recovery deposit of \$5,000.00 to cover a preconstruction meeting, and subsequent monitoring over a five-year period to determine compliance with the Oak Tree Permit.

Department of Regional Planning, Impact Analysis:

3. Deposit of \$3,000.00 to defray the costs of reviewing the subdivider's reports and verifying compliance with the information required by the Mitigation Monitoring Program.

Department of Regional Planning, Zoning Enforcement:

4. Cost recovery deposit of \$1,500.00 to cover the cost of 10 recommended zoning enforcement inspections (recommend two a year for a five-year period). Additional funds would be required if violations are found on the subject property.

STAFF RECOMMENDATION

The following recommendation is subject to change based on oral testimony or documentary evidence submitted during the public hearing process.

Based on the number of requests for additional time, staff recommends that the Commission continue the public hearing to consider all testimony on the project, including the Draft EIR. Staff also recommends that the Commission formally continue the public review period of the EIR to coincide with the continued date.

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Suggested Motion: "I move that the Regional Planning Commission continue the public hearing to allow time for interested parties as they have requested, to continue to allow additional time for review the project and provide comments, and to continue the public comment period for the Draft EIR to coincide with the continued public hearing date of _____, 2007."

Attachments:

Draft Conditions
Conditional Use Permit Burdens of Proof
Oak Tree Permit Burden of Proof
Vesting Tentative Tract Map No. 53108 - reduced size copy
Conditional Use Permit Case Nos. 001-96 and 2005-01121 Exhibit "A" – reduced size copy
Land Use Map
Correspondence
From Applicant: Landmark Planning Notebook, January 2007

SMT:st
01/25/07

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
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TENTATIVE MAP DATED 11-07-2005
EXHIBIT MAP DATED 11-07-2005

The following reports consisting of 30 pages are the recommendations of Public Works.

The subdivision shall conform to the design standards and policies of Public Works, in particular, but not limited to the following items:

1. Details and notes shown on the tentative map are not necessarily approved. Any details or notes which may be inconsistent with requirements of ordinances, general conditions of approval, or Department policies must be specifically approved in other conditions, or ordinance requirements are modified to those shown on the tentative map upon approval by the Advisory agency.
2. Easements are tentatively required, subject to review by the Director of Public Works to determine the final locations and requirements.
3. Easements shall not be granted or recorded within areas proposed to be granted, dedicated, or offered for dedication for public streets, highways, access rights, building restriction rights, or other easements until after the final map is filed with the Registrar-Recorder/County Clerk's Office. If easements are granted after the date of tentative approval, a subordination must be executed by the easement holder prior to the filing of the final map.
4. In lieu of establishing the final specific locations of structures on each lot/parcel at this time, the owner, at the time of issuance of a grading or building permit, agrees to develop the property in conformance with the County Code and other appropriate ordinances such as the Building Code, Plumbing Code, Grading Ordinance, Highway Permit Ordinance, Mechanical Code, Zoning Ordinance, Undergrounding of Utilities Ordinance, Water Ordinance, Sanitary Sewer and Industrial Waste Ordinance, Electrical Code, and Fire Code. Improvements and other requirements may be imposed pursuant to such codes and ordinances.
5. All easements existing at the time of final map approval must be accounted for on the approved tentative map. This includes the location, owner, purpose, and recording reference for all existing easements. If an easement is blanket or indeterminate in nature, a statement to that effect must be shown on the tentative map in lieu of its location. If all easements have not been accounted for, submit a corrected tentative map to the Department of Regional Planning for approval.

HW

Rev. 12-12-2006

6. Adjust, relocate, and/or eliminate lot lines, lots, streets, easements, grading, geotechnical protective devices, and/or physical improvements to comply with ordinances, policies, and standards in effect at the date the County determined the application to be complete all to the satisfaction of Public Works.
7. Prior to final approval of the tract map submit a notarized affidavit to the Director of Public Works, signed by all owners of record at the time of filing of the map with the Registrar-Recorder/County Clerk's Office, stating that any proposed condominium building has not been constructed or that all buildings have not been occupied or rented and that said building will not be occupied or rented until after the filing of the map with the Registrar-Recorder/County Clerk's Office.
8. Place standard condominium/residential planned development/commercial planned development/Landscape Maintenance District notes on the final map to the satisfaction of Public Works. The formation of the Landscape Maintenance District for all median and parkway landscaping must be approved by the Department of Parks and Recreation.
9. Place standard lease purpose only notes on the final map to the satisfaction of Public Works.
10. Label driveways and multiple access strips as "Private Driveway and Fire Lane" and delineate on the final map to the satisfaction of Public Works.
11. Reserve reciprocal easements for drainage, ingress/egress, utilities, and maintenance purposes, etc., in documents over the private driveways and delineate on the final map to the satisfaction of Public Works.
12. If unit filing occurs, reserve reciprocal ingress and egress easements in documents over the private driveways and delineate on the final map to the satisfaction of Public Works.
13. Furnish Public Works' Street Name Unit with a list of street names acceptable to the subdivider. These names must not be duplicated within a radius of 20 miles.
14. A Mapping & Property Management Division house numbering clearance is required prior to approval of the final map.

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TENTATIVE MAP DATED 11-07-2005
EXHIBIT MAP DATED 11-07-2005

15. Design the boundaries of the unit final maps to the satisfaction of the Departments of Regional Planning and Public Works.
16. The first unit of this subdivision shall be filed as Tract No. 53108-01, the second unit, Tract No. 53108-02, and the last unit, Tract No. 53108.
17. A final tract map must be processed through the Director of Public Works prior to being filed with the Registrar-Recorder/County Clerk's Office.
18. Prior to submitting the tract map to the Director of Public Works for examination pursuant to Section 66442 of the Government Code, obtain clearances from all affected Departments and Divisions, including a clearance from the Subdivision Mapping Section of the Land Development Division of Public Works for the following mapping items; mathematical accuracy; survey analysis; and correctness of certificates, signatures, etc.
19. Quitclaim or relocate easements running through proposed structures.
20. A final guarantee will be required at the time of filing of the final map with the Registrar-Recorder/County Clerk's Office.
21. Show open space note and dedicate residential construction rights over the open space lots.
22. If all possible, modify the boundaries of the open space lots or add additional open space lots to include the airspace easements for sight distance to the satisfaction of the Department of Regional Planning and Public Works.
23. Permission is granted to record large lots (20-acre or more) parcel map as shown on the insert map provided full street right of way and slope easements are dedicated along the latest IEC approved alignments on Route 126 (Henry Mayo Drive) and Long Canyon Road to the satisfaction of the Department of Public Works. In addition, make an offer of private and future right of way and dedicate slope easements along all remaining interior streets on alignments to the satisfaction of Public Works. This permission is contingent on deletion of the secondary highway south of and parallel to SR 126 from the County Highway Plan.

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TENTATIVE MAP DATED 11-07-2005
EXHIBIT MAP DATED 11-07-2005

24. Within 30 days of the approval date of this land use entitlement or at the time of first plan check submittal, the applicant shall deposit the sum of \$2,000 (Minor Land Divisions) or \$5,000 (Major Land Divisions) with Public Works to defray the cost of verifying conditions of approval for the purpose of issuing final map clearances. This deposit will cover the actual cost of reviewing conditions of approval for Conditional Use Permits, Tentative Tract and Parcel Maps, Vesting Tentative Tract and Parcel Maps, Oak Tree Permits, Specific Plans, General Plan Amendments, Zone Changes, CEQA Mitigation Monitoring Programs and Regulatory Permits from State and Federal Agencies (Fish and Game, USF&W, Army Corps, RWQCB, etc.) as they relate to the various plan check activities and improvement plan designs. In addition, this deposit will be used to conduct site field reviews and attend meetings requested by the applicant and/or his agents for the purpose of resolving technical issues on condition compliance as they relate to improvement plan design, engineering studies, highway alignment studies and tract/parcel map boundary, title and easement issues. When 80% of the deposit is expended, the applicant will be required to provide additional funds to restore the initial deposit. Remaining balances in the deposit account will be refunded upon final map recordation.

HW
Prepared by Henry Wong

Phone (626) 458-4915

Date 12-29-2005

tr53108L-rev9.doc



**COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION
SUBDIVISION PLAN CHECKING SECTION
DRAINAGE AND GRADING UNIT**

TRACT NO. 53108

REV TENTATIVE MAP DATED 11/07/05
EXHIBIT MAP 11/07/05

DRAINAGE CONDITIONS

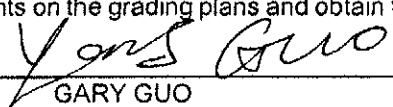
1. Provide drainage facilities to remove the flood hazard and dedicate and show necessary easements and/or right of way on the final map. This is required to the satisfaction of the Department of Public Works prior to the filing of the final map.
2. Place a note of flood hazard on the final map and delineate the areas subject to flood hazard. Show and label all natural drainage courses. Dedicate to the County the right to restrict the erection of buildings in the flood hazard area. This is required to the satisfaction of the Department of Public Works prior to the filing of the final map.
3. A hydrology study for design of drainage facilities is required. Hydrology study must be submitted and approved prior to submittal of improvement plans. This is required to the satisfaction of the Department of Public Works prior to the filing of the final map.
4. Provide fee title lot for debris basins/inlets to the satisfaction of the Department of Public Works.
5. A maintenance permit is required from the State Department of Fish and Game, the Corps of Engineers, and the State Water Resources Control Board for debris basins with a minimum capacity of 5,000 cubic yards. This is required to the satisfaction of the Department of Public Works prior to the filing of the final map.
6. Notify the State Department of Fish and Game prior to commencement of work within any natural drainage course. If non-jurisdiction is established by the Department of Fish and Game, submit a letter of non-jurisdiction to Public Works (Land Development Division).
7. Contact the State Water Resources Control Board to determine if a Notice of Intent (NOI) and a Storm Water Pollution Prevention Plan (SWPPP) are required to meet National Pollution Discharge Elimination System (NPDES) construction requirements for this site.
8. Contact the Corps of Engineers to determine if a permit is required for any proposed work within the major watercourse. Provide a copy of the 404 Permit upon processing of the drainage plans. If non-jurisdiction is established by the Corps of Engineers, submit a letter of non-jurisdiction to Public Works (Land Development Division).
9. This site is located in Zone "A" per the Federal Flood Insurance Rate Map. Public Works, Watershed Management Division (626) 458-4322, should be contacted to obtain procedures for revising the flood insurance rate map once the storm drain facilities are constructed. Encroachment into FEMA Zone "A" is not permitted prior to obtaining a Conditional Letter of Map Revision (CLOMR) from FEMA.
10. Comply with the requirements of the Drainage Concept / Standard Urban Stormwater Mitigation Plan (SUSMP) plan which was conceptually approved on 11/29/06 to the satisfaction of Public Works.
11. Prior to recordation of the final map, form an assessment district to finance the future ongoing maintenance and capital replacement of all SUSMP devices/systems. The developer shall cooperate fully with Public Works in the formation of the assessment district. SUSMP devices/systems may include, but are not limited to, catch basin inserts, debris excluders, biotreatment basins, vortex separation type systems, and other devices/systems for stormwater quality.
12. Prior to recordation of the final map, the developer shall deposit the first year's total assessment based on the engineers estimate as approved by Public Works. This will fund the first year's maintenance after the facilities are accepted. The second and subsequent years assessment will be collected through the property tax bill.

13. Portions of the County Adopted Floodway (maps 43-ML23, 43-ML24, 43-ML25, and 43-ML26) must be revised and/or rescinded by the Board of Supervisors prior to recordation of final map. The project will involve placement of earth fill within the existing Santa Clara River and result in relocating the River through the construction of the improvements. The proposed flood control improvements for this project affecting the County Adopted Floodways include (1) soil cement levee-lining for the fill associated with the development, (2) offsite soil cement levee-lining at south bank of the River, (3) WRP Utility Corridor soil cement levee-lining, (4) SR 126 Utility Corridor non-structural bank erosion protection with Turf Reinforced Mats, and (5) Long Canyon Bridge. The improvements within the existing river will result in relocating the floodplain and require revising the existing County Ordinance Floodways.
14. The location of the alternative onsite debris basin as shown on the approved drainage concept is not necessarily approved. The location of the basin shall be determined in the hydrology study to the satisfaction of Public Works. Modification of the existing Caltrans culvert may be required. This may require a lot configuration change, a change in the number of lots, a revised drainage concept, a revised environmental document, and/or a revised tentative map.
15. The overflow of the existing Chiquito Landfill basin for the alternative onsite debris basin is not fully addressed in the approved drainage concept. This issue must be addressed in the hydrology study to the satisfaction of Public Works. This may require a lot configuration change, a change in the number of lots, a revised drainage concept, a revised environmental document, and/or a revised tentative map.
16. The sizing and design of the proposed non-structural SUSMP system is not fully addressed in the approved drainage concept. Centralized water treatment devices or equivalent may be used as an alternative to the proposed non-structural SUSMP. The sizing, design, and final locations of the proposed SUSMP mitigation shall be addressed in the hydrology study to the satisfaction of Public Works. This may require a lot configuration change, a change in the number of lots, a revised drainage concept, a revised environmental document, and/or a revised tentative map.
17. Locations of trails as shown on the approved drainage concept are not approved.
18. Maintenance of the trail/fill over buried bank stabilization is not a responsibility of L.A. County or LACFCD. Prior to recordation of the final map, an agreement memorializing the maintenance responsibilities must be in place to the satisfaction of Public Works.
19. The non-structural utility corridor embankment is not to be maintained by LACFCD. Prior to recordation of the final map, an agreement memorializing the maintenance responsibilities must be in place to the satisfaction of Public Works.
20. Comply with the requirements of "Newhall Ranch Santa Clara River HEC-RAS Modeling Report dated December 2005 (1-5 to Ventura County Line)" and "Newhall Ranch-Santa Clara River Phase 1 Fluvial Study dated March 6, 2006 (final date pending)" approved on 04/18/06 and the approval letter from Land Development Division of LACDPW.
21. Prior to final map recordation, the top and toe elevations for the levee-lining will require further analysis of the Newhall Ranch Development within the tributary drainage areas and the evaluation of the resulting fluvial impacts (if any) to the Santa Clara River as related to changes in tributary sediment delivery pre- versus post-development condition. The final design and permitting for this tract development requiring bank protection will be based upon the final results as concluded in the "HEC-RAS AND PHASE 1 FLUVIAL ANALYSIS" approved on 04/18/06 and the Phase 2 Fluvial Studies under process and yet to be finished.

=====

GRADING CONDITIONS:

1. A grading plan and soil and geology report must be submitted and approved prior to approval of the final map. The grading plans must show and call out the construction of at least all the drainage devices and details, the paved driveways, the elevation and drainage of all pads, and the SUSMP devices. The applicant is required to show and call out all existing easements on the grading plans and obtain the easement holder approvals prior to the grading plans approval.

Name  Date 11/29/06 Phone (626) 458-4921

GARY GUO

**County of Los Angeles Department of Public Works
GEOTECHNICAL AND MATERIALS ENGINEERING DIVISION
GEOLOGIC REVIEW SHEET
900 So. Fremont Ave., Alhambra, CA 91803
TEL. (626) 458-4925**

DISTRIBUTION
1 Geologist
1 Soils Engineer
1 GMED File
1 Subdivision

TENTATIVE TRACT MAP 53108
SUBDIVIDER Newhall Land & Farming Co. / Newhall Ranch Co.
ENGINEER Psomas
GEOLOGIST & SOILS ENGINEER Allan Seward

TENTATIVE MAP DATED 11/7/05 (Revision)
LOCATION Newhall Ranch
REPORT DATE 2/10/01, 9/27/00 (00-1702R-4)

[X] TENTATIVE MAP FEASIBILITY IS RECOMMENDED FOR APPROVAL. PRIOR TO FILING THE FINAL LAND DIVISION MAP, THE FOLLOWING CONDITIONS MUST BE FULFILLED:

- [X]** The final map must be approved by the Geotechnical and Materials Engineering Division (GMED) to assure that all geotechnical factors have been properly evaluated.
- [X]** A grading plan must be geotechnically approved by the GMED. This grading plan must be based on a detailed engineering geology report and/or soils engineering report and show all recommendations submitted by them. Reports must address grading shown on sheet 5 of the Tentative Map. It must also agree with the tentative map and conditions as approved by the Planning Commission. If the subdivision is to be recorded prior to the completion and acceptance of grading, corrective geologic bonds will be required.
- [X]** All geologic hazards associated with this proposed development must be eliminated,
or
delineate restricted use areas, approved by the consultant geologist and/or soils engineer, to the satisfaction of the Geology and Soils Sections, and dedicate to the County the right to prohibit the erection of buildings or other structures within the restricted use areas.
- []** A statement entitled: "Geotechnical Note(s), Potential Building Site: For grading and corrective work requirements for access and building areas for Lot(s) No(s). _____ refer to the Soils Report(s) by _____, dated _____."
- [X]** The Soils Engineering review dated 12/28/05 is attached.

[] TENTATIVE MAP IS APPROVED FOR FEASIBILITY. THE FOLLOWING INFORMATION IS APPLICABLE TO THIS DIVISION OF LAND:

- []** This project may not qualify for a waiver of final map under section 21.48.140 of the Los Angeles County Title 21 Subdivision Code.
- []** The subdivider is advised that approval of this division of land is contingent upon the installation and use of a sewer system.
- []** Geology and/or soils engineering reports may be required prior to approval of building or grading plans.
- []** Groundwater is less than 10 feet from the ground surface on lots _____
- []** The Soils Engineering review dated _____ is attached.

Prepared by


Geir R. Mathisen

Reviewed by _____

Date 12/6/05

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
GEOTECHNICAL AND MATERIALS ENGINEERING DIVISION

SOILS ENGINEERING REVIEW SHEET

Address: 900 S. Fremont Ave., Alhambra, CA 91803
Telephone: (626) 458-4925
Fax: (626) 458-4913

District Office 8.2
Job Number LX001129
Sheet 1 of 1

Tentative Tract Map	53108
Location	Newhall Ranch
Developer/Owner	Newhall Land and Farming Company
Engineer/Architect	Psomas
Soils Engineer	Allen E. Seward
Geologist	Same as above

DISTRIBUTION:

☐ Drainage
☐ Grading
☐ Geo/Soils Central File
☐ District Engineer
☐ Geologist
☐ Soils Engineer
☐ Engineer/Architect

Review of:

Revised Tentative Tract Map Dated By Regional Planning 11/7/05

Previous review sheet dated 8/31/05

ACTION:

Tentative Map feasibility is recommended for approval, subject to conditions below:

REMARKS:

At the grading plan stage:

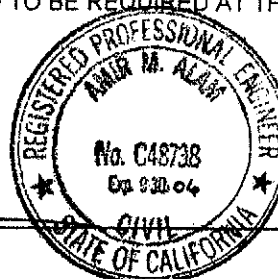
1. Provide geotechnical report addressing all the offsite grading shown on the Tentative Map.
2. Submit two sets of grading plans to the Soils Section for verification of compliance with County codes and policies.

NOTE TO PLAN CHECKER / APPLICANT:

ANY EXTENSIVE REVISIONS TO THE PROPOSED GRADING DETERMINED TO BE REQUIRED AT THE GRADING STAGE FOR THE OFFSITE AREA MAY REQUIRE A REVISED TENTATIVE TRACT MAP.

Reviewed by


Amir M. Alam



Date 12/28/05

NOTICE: Public safety, relative to geotechnical subsurface exploration, shall be provided in accordance with current codes for excavations, inclusive of the Los Angeles County Code, Chapter 11.48, and the State of California, Title 8, Construction Safety Orders.

P:\Amir\53108Tent

The subdivision shall conform to the design standards and policies of Public Works, in particular, but not limited to the following items:

1. A minimum centerline curve length of 100 feet shall be maintained on all local streets. A minimum centerline curve radius of 100 feet shall be maintained on all cul-de-sac streets. Reversing curves of local streets need not exceed a radius of 1,500 feet, and any curve need not exceed a radius of 3,000 feet.
2. The minimum centerline radius is 350 feet on all local streets with 64 feet of right of way and on all the streets where grades exceed 10 percent.
3. Compound curves are preferred over broken-back curves. Broken-back curves must be separated by a minimum of 200 feet of tangent (1,000 feet for multi-lane highways or industrial collectors). If compound curves are used, the radius of the smaller curve shall not be less than two-thirds of the larger curve. The curve length of compound curves shall be adjusted to exceed a minimum curve length of 100 feet, when appropriate.
4. Curves through intersections should be avoided when possible. If unavoidable, the alignment shall be adjusted so that the proposed BC and EC of the curve through the intersection are set back a minimum of 100 feet away from the BCR's of the intersection.
5. Reversing curves and compound curves through intersections should be avoided when possible. If unavoidable, the minimum centerline radius of reversing curves and compound curves through intersections shall comply with design speeds per the Subdivision Plan Checking Section's "Requirements for Street Plans" and sight distances.
6. The minimum centerline radius on a local street with an intersection street on the concave side shall comply with design speeds per the Subdivision Plan Checking Section's "Requirements for Street Plans" and sight distances.
7. The centerline of all local streets shall be aligned without creating jogs of less than 150 feet. A one-foot jog may be used where a street changes width from 60 feet to 58 feet of right of way.
8. Provide minimum landing area of 100 feet for local collectors, 50 feet for local access roads, and 25 feet for cul-de-sacs at a maximum 3 percent grade on all "tee" intersections.

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9. The central angles of the right of way radius returns shall not differ by more than 10 degrees on local streets.
10. At tee intersections involving local streets, the maximum permissible grade of the through street across the intersection is 10 percent. For intersections involving multi-lane highways, the maximum permissible grade of the through street is three percent. For 4-legged intersections, the maximum permissible grade of the through street is 8 percent.
11. Provide intersection sight distance for a design speed of:
 - a. 70 mph or to the satisfaction of Public Works and Caltrans on SR-126 (westerly direction) from Long Canyon Road;
 - b. 60 mph (650 feet) on Long Canyon Road from the commercial driveway serving Lot 351/353 (northerly direction) and from the commercial driveway serving Lot 367/368(southerly direction);
 - c. 45 mph (465 feet) on "A" Street from the commercial driveway serving lot 352 (easterly direction, looking towards the center of the through lane on the northerly side of "A" Street east of Long Canyon Road); from the commercial driveway serving lots 367/375 (easterly direction); from the commercial driveway serving lots 374/375 (westerly direction), if a left-turn movement is proposed; from the park driveway serving lot 344 (easterly direction); from the school driveway lot 345 (easterly direction); from "L" Street (westerly direction); from "N" Street (both directions);
 - d. 30 mph (310 feet) on "C" Street from "D" Street (southwesterly direction); on "F" Street from "D" Street (easterly direction); on "J" Street from "K" Street (westerly direction); on "N" Street from the westerly intersection with "Q" Street (easterly direction); on "O" Street from "N" Street (southerly direction); on "O" Street from the easterly intersection with "Q" Street (southwesterly direction); on "Q" Street from the westerly intersection with "N" Street (northerly direction); and on "Q" Street from the easterly intersection with "N" Street (northwesterly direction).

Line of sight shall be within right of way or dedicate airspace easements to the satisfaction of Public Works. Additional grading may be required. With respect to the position of the vehicle at the minor road, the driver of the vehicle is presumed to be located 4 feet right of centerline and 10 feet back the top of curb (TC) or flow line (FL) prolongation. When looking left, we consider the target to be located at the center of the lane nearest to the parkway curb. We use 6 feet from TC as a conservative rule, in the case of pop outs we use 6 feet from TC of the travel lane. When looking right, the target is the center of the lane nearest to the centerline or from the median TC (when present). We use 6 feet from centerline or from the median TC as a conservative rule.

12. Provide standard property line return radii of 13 feet at all local street intersections, including intersection of local streets with planned highways (those on the County Highway Plan), 27 feet where all planned highways intersect or where one of the roads serves a commercial or industrial development, or to the satisfaction of Public Works.
13. Dedicate vehicular access rights on SR-126, unless the Department of Regional Planning requires the construction of a wall. In such cases, complete access rights shall be dedicated.
14. Dedicate right of way to the satisfaction of Public Works and Caltrans a minimum of 70 feet from the latest approved centerline on Henry Mayo Drive (SR-126). The proposed 140-foot typical section of Henry Mayo Drive (SR-126) is conditionally approved. Approval is contingent on the traffic study demonstrating that the projected traffic volumes do not exceed the capacity of this roadway. If so, provide additional right of way for additional lanes, exclusive left-turn lanes, exclusive right-turn lanes, and transition improvements to the satisfaction of Public Works and Caltrans. The cross sections and lane configurations as shown are not necessarily approved and are still subject to review and approval to the satisfaction of Public Works.
15. Make an offer of future right of way and provide slope easements at the future Henry Mayo Drive (SR-126) / Long Canyon Road Interchange and Henry Mayo Drive (SR-126) / Wolcott Road Interchange to the satisfaction of Public Works.
16. Design all affected intersections and driveway entrances along Long Canyon Road and Wolcott Road to be compatible with vertical approaches to the future grade separations at the Henry Mayo Drive (SR-126) interchanges and at the Santa Clara River to the satisfaction of Public Works.

17. The Newhall Ranch Specific Plan also included a secondary highway through this tract (south of and parallel to SR-126). The deletion of this future highway requires the filing of a highway plan amendment through the IEC. For more information, please contact Barry Witler at (626) 458-4351.
18. Dedicate right of way a minimum of 57 feet (no parking, on street bike lane) from the latest approved centerline on Long Canyon Road per P-265(PW) to the satisfaction of Public Works.
 - a. Long Canyon Road within this tract is a major highway added to the County Highway Plan through the adoption of the Newhall Ranch Specific Plan. The applicant shall prepare an alignment for Long Canyon Road and obtain Public Works approval. An exception for a 60 mph design speed for Long Canyon Road within Tract 53108 must be approved by Public Works. For more information, please contact Barry Witler at (626) 458-4351.
 - b. Approval is contingent on the traffic study demonstrating that the projected traffic volumes do not exceed the capacity of this roadway. If so, provide additional right of way for exclusive left-turn lanes, exclusive right-turn lanes, and transition improvements on Long Canyon Road.
 - b. The cross sections and lane configurations as shown are not necessarily approved and are still subject to review and approval to the satisfaction of Public Works.
 - c. Permission is granted to use modified street sections on Long Canyon Road subject to review and approval to the satisfaction of Public Works. The proposed 114-foot typical sections are conditionally approved with a median width of 14 feet and pavement on each side of the raised median at least 42 feet wide between curbs.
 - d. Dedicate additional right of way on Long Canyon Road in the vicinity of the bridge to provide full-width sidewalk with 8 feet of clearance on the bridge."
 - e. Maintain a minimum of 8 feet wide parkway on Long Canyon Road.
 - f. Establish a landscape maintenance district, subject to the approval of the Department of Parks and Recreation, for the purpose of maintaining the landscaped medians and parkways (if applicable) on Long Canyon Road.

19. Dedicate 110 feet of right of way on "A" Street from Long Canyon Road to Wolcott Road for design speed of 45 mph to the satisfaction of Public Works.
 - a. Approval is contingent on the traffic study demonstrating that the projected traffic volumes do not exceed the capacity of this two-lane roadway. If so, provide additional right of way for additional lanes, exclusive left-turn lanes, exclusive right-turn lanes, and transition improvements.
 - b. The cross sections and lane configurations as shown are not necessarily approved and are still subject to review and approval to the satisfaction of Public Works.
 - c. Permission is granted to use modified street sections along "A" Street from Long Canyon Road to Wolcott Road subject to review and approval to the satisfaction of Public Works. The proposed 110-foot typical sections of "A" Street are conditionally approved with a median width of 14 feet and pavement on each side of the raised median at least 30 feet wide between curbs to accommodate one travel lane, a striped bike lane, and a parking lane.
 - d. Maintain a minimum of 12 feet wide parkway on "A" Street.
 - e. The details of the sidewalks, landscaping, and swales in the parkway are not necessarily approved. Establish a landscape maintenance district, subject to the approval of the Department of Parks and Recreation, for the purpose of maintaining the landscaped medians and parkways on "A" Street.
20. Dedicate right of way 53 feet from the centerline on Wolcott Road from Henry Mayo Drive (SR-126) to "A" Street for design speed of 45 mph to the satisfaction of Public Works.
 - a. Approval is contingent on the traffic study demonstrating that the projected traffic volumes do not exceed the capacity of this two-lane roadway. If so, provide additional right of way for exclusive left-turn lanes, exclusive right-turn lanes, and transition improvements.
 - b. The cross sections and lane configurations as shown are not necessarily approved and are still subject to review and approval to the satisfaction of Public Works.

- c. Permission is granted to use modified street sections on Wolcott Road. The proposed 106-foot street section on Wolcott Road is conditionally approved. Design the cross sections for Wolcott Road to provide lane configurations: with a median width of 14 feet and pavement on each side of the raised median at least 26 feet curb to curb (no parking, no bike lane), 32 feet curb to curb (on street parking, no bike lane), or 31 feet curb to curb (no parking, on street bike lane) and parkway width to the satisfaction of Public Works. Provide standard lane configurations based on cross sections for a secondary highway in accordance with Section 21.24.065 of the Subdivision Ordinance proposed cross sections and/or based on the approved traffic study to the satisfaction of Public Works.
 - d. The details of the sidewalks and landscaping in the parkway are not necessarily approved. Establish a landscape maintenance district, subject to the approval of the Department of Parks and Recreation, for the purpose of maintaining the landscaped medians and parkways on Wolcott Road.
- 21. Dedicate additional right of way at all proposed roundabout locations to the satisfaction of Public Works.
 - 22. Dedicate the right to restrict vehicular access on Long Canyon Road, Wolcott Road and "A" Street. All proposed driveway locations, driveway widths, median setbacks, and median openings as shown on the tentative map are not necessarily approved and are still subject to review and approval to the satisfaction of Public Works.
 - 23. Dedicate right of way 42 feet from centerline including a standard cul-de-sac bulb on "Y" Street for a design speed of 45 mph to the satisfaction of Public Works. If required, provide additional right of way at the intersection with Long Canyon Road to the satisfaction of Public Works.
 - 24. Dedicate right of way 32 feet from centerline on "A" Street from Wolcott Road to "D" Street.
 - 25. Dedicate right of way 29 feet from centerline on "A" Street from "D" Street to "C" Street, "B" Street, "C" Street, "D" Street, "E" Street, "F" Street, "G" Street, "H" Street, "I" Street, "J" Street, "K" Street, "L" Street, "M" Street, "N" Street, "O" Street, "Q" Street, and "Z" Street.
 - 26. Permission is granted to use the 58-foot modified local street section with 34 feet in roadway width with parking allowed on both sides of the street.

27. Dedicate additional right of way for standard knuckles and standard cul-de-sac bulbs to the satisfaction of Public Works.
28. Construct curb, gutter, base, pavement, and sidewalk on all streets and highways (except SR-126.) to the satisfaction of Public Works.
29. Construct improvements along the property frontage on Henry Mayo Drive (SR-126) to the satisfaction of Caltrans.
30. Construct additional pavement on Henry Mayo Drive (SR-126) as may be determined necessary to mitigate project impacts to provide exclusive right-turn lanes, left-turn lanes, and transitions at entrance street intersections to the satisfaction of Public Works and Caltrans.
31. Obtain an encroachment permit from Caltrans for all improvements along Henry Mayo Drive (SR-126).
32. Plant street trees on all local streets and highways (except SR-126).
33. Construct the pedestrian bridge over Henry Mayo Drive (SR-126) to the satisfaction of Public Works and Caltrans. The foundation of the pedestrian bridge shall be located outside of the road right of way.
34. Construct a slough wall outside the street right of way when the height of the slope is greater than five feet above the sidewalk and the sidewalk is adjacent to the street right of way. The wall shall not impede any required line of sight.
35. Construct drainage improvements (and parkway drains, if needed) and offer easements needed for street drainage or slopes to the satisfaction of Public Works. Where streets or highways are located within flood hazard areas or subject to inundation, provide adequate freeboard and slope protection to the satisfaction of Public Works. Construct adequate embankment protection along any sections of highways or streets located within flood plain boundaries or subject to inundation. Adequate freeboard shall also be provided.
36. Underground all existing service lines and distribution lines that are less than 50 KV and new utility lines to the satisfaction of Public Works and Southern California Edison. Please contact Construction Division at (626) 458-3129 for new location of any above ground utility structure in the parkway.

37. Install postal delivery receptacles in groups to serve two or more residential lots.
38. Provide and install street name signs prior to occupancy of buildings.
39. Prior to final map approval, enter into an agreement with the County franchised cable TV operator (if an area is served) to permit the installation of cable in a common utility trench to the satisfaction of Public Works, or provide documentation that steps to provide cable TV to the proposed subdivision have been initiated to the satisfaction of Public Works.
40. Comply with the following street lighting requirements:
 - a. Provide street lights on concrete poles with underground wiring within the tract boundaries on all streets and highways including Henry Mayo Drive (SR-126) to the satisfaction of Public Works and Caltrans. Submit street lighting plans as soon as possible for review and approval to the Street Lighting Section of the Traffic and Lighting Division. For additional information, please contact the Street Lighting Section at (626) 300-4726.
 - b. The proposed development, or portions thereof, are not within an existing Lighting District. Annexation and assessment balloting are required. Upon tentative map approval, the applicant shall comply with conditions listed below in order for the Lighting District to pay for the future operation and maintenance of the street lights. The Board of Supervisors must approve the annexation and levy of assessment (should assessment balloting favor levy of assessment) prior to filing of the final subdivision maps for each area with the Registrar-Recorder/County Clerk.
 - (1) Request the Street Lighting Section to commence annexation and levy of assessment proceedings.
 - (2) Provide business/property owner's name(s), mailing address(es), site address, Assessor Parcel Number(s), and Parcel Boundaries in either Microstation or Auto CADD format of territory to be developed to the Street Lighting Section.
 - (3) Submit a map of the proposed development including any roadways conditioned for street lights that are outside the proposed project area to Street Lighting Section. Contact the Street Lighting Section for map requirements and with any questions at (626) 300-4726.

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- c. The annexation and assessment balloting process takes approximately ten to twelve months to complete once the above information is received and approved. Therefore, untimely compliance with the above will result in a delay in receiving approval of the street lighting plans or in filing the final subdivision map for recordation. Information on the annexation and the assessment balloting process can be obtained by contacting Street Lighting Section at (626) 300-4726.
 - d. For acceptance of street light transfer of billing, the area must be annexed into the Lighting District and all street lights in the development, or the current phase of the development, must be constructed according to Public Works approved plans. The contractor shall submit one complete set of "as-built" plans. Provided the above conditions are met, all street lights in the development, or the current phase of the development, have been energized, and the developer has requested a transfer of billing at least by January 1 of the previous year, the Lighting District can assume responsibility for the operation and maintenance of the street lights by July 1 of any given year. The transfer of billing could be delayed one or more years if the above conditions are not met.
- 41. Prepare detailed 1" = 40' scaled signing and striping plans for Henry Mayo Drive (SR-126), Long Canyon Road, Wolcott Road, "Y" Street, and "A" Street within or abutting this subdivision to the satisfaction of Public Works and Caltrans.
 - 42. Prepare detailed 1" = 40' scaled signing and striping plans for all off-site intersections affected by this subdivision as indicated in the attached letter dated December 9, 2004 from our Traffic and Lighting Division to the satisfaction of Public Works and Caltrans.
 - 43. As indicated in the attached letter dated December 9, 2004 from our Traffic and Lighting Division, install traffic signals (both on-site and off-site) for all signalized intersections and prepare 1" = 20' scaled traffic signal plans to the satisfaction of Public Works. If required, provide additional right of way to the satisfaction of Public Works.
 - 44. Comply with the mitigation measures (including off-site improvements) identified in the attached December 9, 2004 letter from our Traffic and Lighting Division to the satisfaction of Public Works. It shall be the sole responsibility of the subdivider to acquire the necessary off-site right of way and/or easements.

45. If needed, the location of the driveway to Lot 352 and the southerly driveway to Lot 354 on "Y" Street shall be relocated to reflect the conceptual plan to the satisfaction of Public Works.
46. Setback the raised median nose a minimum of 20 feet from the right of way within private driveway and fire lanes on all lots to the satisfaction of Public Works.
47. Setback the raised median noses a minimum of 20 feet on all streets to the satisfaction of Public Works.
48. Provide adequate spacing (minimum of 50 feet) on the northerly driveway to Lot 354 between the right of way and the first curb opening to the parking area for buildings A and B (shown on Exhibit Map Sheet 7 of 12) to the satisfaction of Public Works.
49. Permission is granted to record large lots (20 acre or more) parcel map as shown on the insert map provided full street right of way and slope easements are dedicated along the latest approved alignments on Henry Mayo Drive (SR-126) and Long Canyon Road to the satisfaction of Public Works. In addition, make an offer of private and future right of way and dedicate slope easements along all remaining interior streets (including Wolcott Road) on alignments to the satisfaction of Public Works. This permission is contingent on deletion of the secondary highway south of and parallel to SR-126 from the County Highway Plan.
50. Permission is granted to use modified street cross-sections as shown on the tentative map to the satisfaction of Public Works. However, the subdivider may elect to construct standard and/or alternate street cross section to the satisfaction of Public Works. If alternate street cross sections are proposed, construct additional sidewalk pop-out along the property frontage on all applicable streets in the vicinity of any above ground utilities to meet current ADA requirements to the satisfaction of Public Works.
51. All site plans shall be reviewed and approved by Public Works prior to final approval.

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION - ROAD
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52. Additional comments/requirements:

- The street profiles along Long Canyon Road and Wolcott Road showing the vertical approach to the proposed interchanges, the at-grade intersections at SR-126 (Henry Mayo Drive), and at the Santa Clara River (Long Canyon Road only) as shown on the tentative map are not necessarily approved. The design and construction on Long Canyon Road and Wolcott Road must be compatible with the ultimate improvements on SR-126 and the Santa Clara River (Long Canyon Road only) to the satisfaction of Public Works.

HW
Prepared by Timothy Chen
tr53108r-rev9.doc

Phone (626) 458-4915

Date 12-29-2005

**COUNTY OF LOS ANGELES****DEPARTMENT OF PUBLIC WORKS***"To Enrich Lives Through Effective and Caring Service"*

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P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: T-4

December 9, 2004

Mr. Daryl Zerfass
Austin-Foust Associates, Inc.
2020 North Tustin Avenue
Santa Ana, CA 92705-7827

Dear Mr. Zerfass:

**RIVER VILLAGE
TENTATIVE TRACT NO. 53108
TRAFFIC IMPACT ANALYSIS (SEPTEMBER 28, 2004)
CASTAIC JUNCTION AREA**

As requested, we have reviewed the above-mentioned document. The project is located in the unincorporated County of Los Angeles area of Castaic Junction. The project site is bounded by State Route (SR) 126 to the north, the Santa Clarita River to the south, and the Castaic Creek to the east.

The proposed project, River Village, is the first phase of the Newhall Ranch Specific Plan (NRSP). The NRSP has been approved for approximately 21,000 residential dwelling units. River Village consists of the development of 591 single-family detached dwelling units, 398 condominium units and 455 apartments units for a total of 1,444 residential dwelling units; a 750 student elementary school; a 20.9-acre public park; and 1,040,000 square feet of commercial uses. The project is estimated to generate approximately 41,880 vehicle trips daily, with 2,910 and 4,160 vehicle trips during the a.m. and p.m. peak hours, respectively. The document addresses the project in three development phases: 2007 for Phase I, 2008 for Phase II, and 2010 for Phase III. Phase I consists of 500 residential units. Phase II consists of the remaining residential units, the elementary school, 100,000 feet of commercial uses, and the public park. Phase III consists of the balance of the commercial uses for 940,000 square feet.

FILE COPY

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We have received a separate technical report for the proposed west and east roundabouts for the intersections of Driveway – Tentative Tract No. 53018, Lots 373 and 374; and Wolcott Road; both at "A" Street – Tentative Tract No. 53108, respectively. We will provide additional comment on the roundabouts, as we complete our review of the submitted report.

We generally agree with the traffic impact analysis and require the following traffic impact mitigation measures with the project approval. The traffic impact analysis shall be revised to be consistent with mitigation measures contained in this letter.

- The main access for River Village will be provided from SR-126 via the existing intersections of Wolcott Way and Chiquito Canyon Road. Future phases of the NRSP will provide access to and from south via Long Canyon Road. Unless an updated long range study is prepared which demonstrates that the intersections will adequately handle the area buildout traffic as at grade intersections, adequate road right of way shall be reserved for future grade separated interchanges at these two locations, as approved in the NRSP.
- The study is based on the Santa Clarita Valley Consolidated Traffic Model and assumes the following roadway improvements will be in place with Phase I of the project. In accordance with our Traffic Impact Analysis Report Guidelines (TIARG), these improvements shall be made a condition of approval for the project to be in place prior to issuance of any building permit(s) for Phase I of the project.
 - Reconstruct the Golden State (I-5) Freeway/SR-126 Freeway interchange by adding access to eastbound SR-126 from southbound I-5, access to southbound I-5 from westbound SR-126, direct access to northbound I-5 from westbound SR-126, and widening bridge to 8 lanes.
 - Construct Newhall Ranch Road segment between Vanderbilt Way and Copper Hill Drive/Rye Canyon Road.
- The traffic signals shall be installed at the following intersections. The design and the construction of the traffic signals shall be the sole responsibility of the project. The signals shall be in place at their ultimate design locations prior to the issuance of any building permit(s) for the indicated phase of the project to the satisfaction of Public Works.

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Phase I: Wolcott Way at Henry Mayo Drive (SR-126)

Phase II: Chiquito Canyon Road and Long Canyon Road (Future) at Henry Mayo Drive (SR-126)

Phase III: Long Canyon Road at "Y" Street and "A" Street (TT 53108)

- The traffic generated by the project alone will significantly impact the following intersections. The following improvements shall be the sole responsibility of the project and be a condition of approval to be in place prior to the issuance of any building permit(s) for the indicated phase. Detailed striping and signal modification plans must be submitted for review and approval.

PHASE I

Wolcott Way at Henry Mayo Drive (SR-126)

North approach: One left-turn lane, one through lane, and an exclusive right-turn lane (convert shared left-turn/through lane to through lane).

South approach (future): One left-turn lane, one through lane, and an exclusive right-turn lane (add one left-turn lane, convert shared left-turn/through/right-turn lane to through lane and add an exclusive right-turn lane).

Design and install traffic signals to the satisfaction of Public Works.

School Middle Driveway/"S" Street at "A" Street (TT 53108)

The projects shall be responsible for the preparation of traffic signal design plans and securing adequate funds with Public Works for the full construction of the signals. The intersection will be monitored for the installation of the signals once the school is fully occupied with 750 students.

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Chiquito Canyon Road and Long Canyon Road (Future) at Henry Mayo Drive (SR-126)

North approach: One left-turn lane and one shared through/right-turn lane (convert shared left-turn/through lane to left-turn lane and exclusive right-turn lane to shared through/right-turn lane).

East approach: One left-turn lane, two through lanes, and an exclusive right-turn lane (add one left-turn lane and convert shared left-turn/through lane to through lane).

South approach (future): One left-turn lane, one through lane, and an exclusive right-turn lane (add one left-turn lane, convert shared left-turn/through/right-turn lane to through lane and add an exclusive right-turn lane).

PHASE II

Wolcott Way at Henry Mayo Drive (SR-126)

East approach: Two left-turn lanes, two through lanes, and an exclusive right-turn lane (add second left-turn lane, convert shared through/right-turn lane to through lane and add an exclusive right-turn lane).

South approach (future): One left-turn lane, one through lane, and two exclusive right-turn lanes (add second exclusive right-turn lane from Phase I).

West approach: One left-turn lane, two through lanes, and an exclusive right-turn lane (convert through/right-turn to through lane and add an exclusive right-turn lane).

Modify traffic signals to the satisfaction of Public Works.

PHASE III

Golden State (I-5) Freeway Southbound Ramps at Henry Mayo Drive (SR-26)

East approach: Three through lanes and a free right-turn lane (add third through lane).

Modify traffic signals to the satisfaction of Public Works.

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Wolcott Way at Henry Mayo Drive (SR-126)

West approach: One left-turn lane, three through lanes, and an exclusive right-turn lane (add third through lane).

Modify traffic signals to the satisfaction of Public Works.

Chiquito Canyon Road and Long Canyon Road (Future) at Henry Mayo Drive (SR-126)

North approach: One left-turn lane, one through lane, and an exclusive right-turn lane (convert shared through/right-turn lane to through lane and add an exclusive right-turn lane).

East approach: Two left-turn lanes, two through lanes, and an exclusive right-turn lane (add second left-turn lane).

South approach (future): One left-turn lane, two through lanes, and two exclusive right-turn lanes (add second through lane and second exclusive right-turn lane).

Modify traffic signals to the satisfaction of Public Works.

- The cumulative traffic generated by the project and other related projects will significantly impact the following intersections. The project shall contribute its proportionate share of the cost for the following mitigation measures. Detailed striping and/or signal modification plans must be prepared to determine the feasibility of the recommended mitigation measures and cost estimate of each mitigation measure.

Golden State (I-5) Freeway Southbound Ramps at Henry Mayo Drive (SR-126)

North approach: Two left-turn lanes, one shared left-turn/through lane, and an exclusive right-turn lane (add one shared left/right-turn lane).

East approach: Four through lanes and one free right-turn lane (add fourth through lane).

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West approach: Four through lanes and one free right-turn lane (add third and fourth through lanes).

Modify traffic signals to the satisfaction of Public Works.

The project's total pro-rata share is 38.3 percent. The project may elect to pay by phase as each phase gets recorded: Phase I = 8.3 percent, Phase II = 8.1 percent and Phase III = 21.9 percent.

Golden State (I-5) Freeway Northbound Ramps at Henry Mayo Drive (SR-126)

East approach: Three through lanes and one free right-turn lane (add third through lane).

South approach: Three left-turn lanes and an exclusive right-turn lane (add third left-turn lane).

West approach: Four through lanes and one free right-turn lane (add third and fourth through lanes).

Modify traffic signals to the satisfaction of Public Works.

The project's total pro-rata share is 20.8 percent. The project may elect to pay by phase as each phase gets recorded: Phase I = 4.7 percent, Phase II = 4.0 percent, and Phase III = 12.1 percent.

Wolcott Way at Henry Mayo Drive (SR-126)

North approach: Two left-turn lanes, one through lane, and an exclusive right-turn lane (add second left-turn lane).

East approach: Two left-turn lanes, three through lanes, and an exclusive right-turn lane (add third through lane).

West approach: Two left-turn lanes, three through lanes, and an exclusive right-turn lane (add second left-turn lane).

Modify traffic signals to the satisfaction of Public Works.

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The project's total pro-rata share is 62.1 percent. The project may elect to pay by phase as each phase gets recorded: Phase I = 12.2 percent, Phase II = 19.3 percent, and Phase III = 30.6 percent.

Commerce Center Drive at Henry Mayo Drive (SR-126) Interchange

Pay the project's total pro-rata share for the construction of interchange of 33.8 percent. The project may elect to pay by phase as each phase gets recorded: Phase I = 6.6 percent, Phase II = 9.1 percent, and Phase III = 18.1 percent.


- The developer shall coordinate with and notify the Castaic Union School District (CUSD) that traffic circulation plan and the drop-off/pick-up procedures shall be prepared and submitted to Traffic and Lighting Division for review and approval. We recommend a mechanism for enforcement and levying of noncompliance penalties be included in the plan. The CUSD shall prepare informational packets containing the approved drop-off/pick-up procedures and provide to the parents/guardians of students of the school. The recordation of the phase containing Lot 345 where the school is proposed shall be withheld until the student drop-off/pick-up procedures, the informational packets or brochures, and the revised school site plan have been received and approved by Public Works.
- A determination shall be made regarding whether the project has a significant impact on the adjacent I-5 Freeway. Caltrans shall be consulted to obtain their written concurrence with the California Environmental Quality Act level of significance determination. These written comments from Caltrans shall be submitted to Public Works for review and approval.

If you have any questions regarding the traffic analysis and mitigation measures, please contact Mr. Suen Fei Lau of our Land Development Review Section at (626) 300-4820; for questions regarding striping and signing plans, please contact Mr. Sam Richards of our Land Development Review Section at (626) 300-4842; for questions regarding parking restrictions and drop-off/pick-up procedures/program/plan, please contact Ms. Guita Sheik of our Traffic Investigation Section at (626) 300-4712.

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Very truly yours,

DONALD L. WOLFE
Interim Director of Public Works


WILLIAM J. WINTER
Assistant Deputy Director
Traffic and Lighting Division

see on
SFL:cn
.EIR04297.doc

- cc: Castaic Union School District (Beverly W. Silsbee)
Department of Regional Planning (Daryl Koutuik)
- bc: Building and Safety
Land Development (Wittler)
Traffic and Lighting (Richards, Sheik)

The subdivision shall conform to the design standards and policies of Public Works, in particular, but not limited to the following items:

1. The subdivider shall install and dedicate main line sewers and serve each building/lot with a separate house lateral or have approved and bonded sewer plans on file with Public Works.
2. The outlet for the proposed sewer system for any unit map must be accepted for public use prior to recordation, otherwise the unit map in question must have approved and bonded sewer plans for the outlet system extending downstream to public sewer on file with Public Works.
3. The tentative map must conform with the approved master sewer area study PC 11812as (currently in plancheck with Public Works). If the system appurtenances and maintenance responsibilities shown on the tentative map do not match those detailed in the approved study, a revised map is required to the satisfaction of Public Works.
4. Prior to recordation of the first unit map a new sanitation district must be formed to operate and maintain all regional sewer facilities associated with this project including but not limited to pump stations, forcemain and gravity trunk lines, and treatments plants. The subdivider shall provide the initial funding for the setup and operation of this district to the satisfaction of Public Works.
5. Prior to recordation of the first unit map the subdivider shall install and dedicate required regional sewer infrastructure or have approved and bonded sewer plans on file with the Newhall Ranch Sanitation District to the satisfaction of Public Works.
6. Prior to recordation of the first unit map the subdivider shall acquire all regulatory permits necessary for the construction of both local and regional sewer facilities.
7. The subdivider shall submit an area study to Public Works to determine if capacity is available in the proposed sewerage system servicing this land division. The approved sewer area study shall remain valid for two years after initial approval of the tentative map. After this period of time, an update of the area study shall be submitted by the applicant if determined to be warranted by Public Works.
8. If the proposed sewer system shown on the tentative map is found to have insufficient capacity, upgrade the proposed sewerage system (both on and off-site) to the satisfaction of Public Works.

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION – SEWER
TRACT NO. 53108 (Rev.)

Page 2/2

TENTATIVE MAP DATED 11-07-2005

9. Construct regional sewer pump stations to the satisfaction of the Newhall Ranch Sanitation District.
10. Easements are required, subject to review by Public Works to determine the final locations and requirements.
11. Provide any necessary off-site easements to construct the off-site sewer improvements to the satisfaction of the Newhall Ranch Sanitation District. It shall be the sole responsibility of the subdivider to acquire the necessary easements.

HW
Prepared by Nathan Howells
tr53108s-rev9(rev'd 06-19-06).doc

Phone (626) 458-4921

Date Rev. 06-19-2006

The subdivision shall conform to the design standards and policies of Public Works, in particular, but not limited to the following items:

1. A "Written Verification" and supporting documents from the water supplier to indicate the availability of a "Sufficient Water Supply" as required per Section 66473.7 of the Subdivision Map Act (SB 221) shall be provided to the satisfaction of the Department of Regional Planning and Public Works prior to filing any map.
2. A water system maintained by the water purveyor, with appurtenant facilities to serve all buildings/lots in the land division, must be provided. The system shall include fire hydrants of the type and location (both on-site and off-site) as determined by the Fire Department. The water mains shall be sized to accommodate the total domestic and fire flows.
3. There shall be filed with Public Works a statement from the water purveyor indicating that the water system will be operated by the purveyor, and that under normal conditions, the system will meet the requirements for the land division, and that water service will be provided to each building/lot.
4. Easements shall be granted to the County, appropriate agency or entity for the purpose of ingress, egress, construction and maintenance of all infrastructures constructed for this land division to the satisfaction of Public Works.
5. Submit landscape and irrigation plans for each open space in the land division, with landscape area greater than 2,500 square feet, in accordance with the Water Efficient Landscape Ordinance.
6. Depict all line of sight easements on the landscaping and grading plans.



COUNTY OF LOS ANGELES
FIRE DEPARTMENT

5823 Rickenbacker Road
Commerce, California 90040

KF
S. TAE

* to be up'd *

WATER SYSTEM REQUIREMENTS - UNINCORPORATED

Subdivision No. 53108 Tentative Map Date 7-November-05, Ex. A

Revised Report yes

- ☐ The County Forester and Fire Warden is prohibited from setting requirements for water mains, fire hydrants and fire flows as a condition of approval for this division of land as presently zoned and/or submitted. However, water requirements may be necessary at the time of building permit issuance.
- ☒ The required fire flow for public fire hydrants at this location is 5000 gallons per minute at 20 psi for a duration of 5 hours, over and above maximum daily domestic demand. 3 Hydrant(s) flowing simultaneously may be used to achieve the required fire flow.
- ☐ The required fire flow for private on-site hydrants is gallons per minute at 20 psi. Each private on-site hydrant must be capable of flowing gallons per minute at 20 psi with two hydrants flowing simultaneously, one of which must be the furthest from the public water source.
- ☒ Fire hydrant requirements are as follows:
- Install 91 public fire hydrant(s). Upgrade / Verify existing public fire hydrant(s).
- Install private on-site fire hydrant(s).
- ☒ All hydrants shall measure 6"x 4"x 2-1/2" brass or bronze, conforming to current AWWA standard C503 or approved equal. All on-site hydrants shall be installed a minimum of 25' feet from a structure or protected by a two (2) hour rated firewall.
- ☒ Location: As per map on file with the office.
- ☐ Other location:
- ☒ All required fire hydrants shall be installed, tested and accepted or bonded for prior to Final Map approval. Vehicular access shall be provided and maintained serviceable throughout construction.
- ☐ The County of Los Angeles Fire Department is not setting requirements for water mains, fire hydrants and fire flows as a condition of approval for this division of land as presently zoned and/or submitted.
- ☐ Additional water system requirements will be required when this land is further subdivided and/or during the building permit process.
- ☐ Hydrants and fire flows are adequate to meet current Fire Department requirements.
- ☐ Upgrade not necessary, if existing hydrant(s) meet(s) fire flow requirements. Submit original water availability form to our office.

Comments: Detached condo's. The required fire flow for, public fire hydrants at this location is 1500 gallons per minute at 20 psi for a duration of 2 hours, over and above maximum daily domestic demand. 2 Hydrant(s) flowing simultaneously may be used to achieve the required fire flow.

Single family dwellings. The required fire flow for public fire hydrants at this location is 1250 gallons per minute at 20 psi for a duration of 2 hours, over and above maximum daily domestic demand. 1 Hydrant(s) flowing simultaneously may be used to achieve the required fire flow.

All hydrants shall be installed in conformance with Title 20, County of Los Angeles Government Code and County of Los Angeles Fire Code, or appropriate city regulations. This shall include minimum six-inch diameter mains. Arrangements to meet these requirements must be made with the water purveyor serving the area.

Inspector Janna Masi Date 21-Mar-06



COUNTY OF LOS ANGELES

FIRE DEPARTMENT

5823 Rickenbacker Road
Commerce, California 90040

CONDITIONS OF APPROVAL FOR SUBDIVISION - UNINCORPORATED

Subdivision: 53108 Map Date 7-November-05, Ex. A

C.U.P. 00-196 Vicinity Salt Canyon

- ☒ **FIRE DEPARTMENT HOLD** on the tentative map shall remain until verification from the Los Angeles County Fire Dept. Planning Section is received, stating adequacy of service. Contact (323) 881-2404.
- ☒ Access shall comply with Title 21 (County of Los Angeles Subdivision Code) and Section 902 of the Fire Code, which requires all weather access. All weather access may require paving.
- ☒ Fire Department access shall be extended to within 150 feet distance of any exterior portion of all structures.
- ☒ Where driveways extend further than 150 feet and are of single access design, turnarounds suitable for fire protection equipment use shall be provided and shown on the final map. Turnarounds shall be designed, constructed and maintained to insure their integrity for Fire Department use. Where topography dictates, turnarounds shall be provided for driveways that extend over 150 feet in length.
- ☒ The private driveways shall be indicated on the final map as "Private Driveway and Firelane" with the widths clearly depicted. Driveways shall be maintained in accordance with the Fire Code.
- ☒ Vehicular access must be provided and maintained serviceable throughout construction to all required fire hydrants. All required fire hydrants shall be installed, tested and accepted prior to construction.
- ☒ This property is located within the area described by the Fire Department as "Very High Fire Hazard Severity Zone" (formerly Fire Zone 4). A "Fuel Modification Plan" shall be submitted and approved prior to final map clearance. (Contact: Fuel Modification Unit, Fire Station #32, 605 North Angeleno Avenue, Azusa, CA 91702-2904, Phone (626) 969-5205 for details).
- ☒ Provide Fire Department or City approved street signs and building access numbers prior to occupancy.
- ☐ Additional fire protection systems shall be installed in lieu of suitable access and/or fire protection water.
- ☐ The final concept map, which has been submitted to this department for review, has fulfilled the conditions of approval recommended by this department for access only.
- ☐ These conditions must be secured by a C.U.P. and/or Covenant and Agreement approved by the County of Los Angeles Fire Department prior to final map clearance.
- ☐ The Fire Department has no additional requirements for this division of land.

Comments: See additional comment sheets.

By Inspector: Janna Masi Date 21-Mar-06

Land Development Unit – Fire Prevention Division – (323) 890-4243, Fax (323) 890-9783



**COUNTY OF LOS ANGELES
FIRE DEPARTMENT**

5823 Rickenbacker Road
Commerce, California 90040

LAND DEVELOPMENT UNIT REQUIREMENTS

ADDITIONAL PAGE

SUBDIVISION NO. **53108**

PAGE NO. **1**

- 1 Tentative map page 1
A. A second means of vehicular access shall be provided to Highway 126 prior to the building permit issuance of the 150 unit.
- 2 Exhibit "A", All structures shall be places such that, vehicular access is provided to within 150' of all exterior walls. Said access shall be verified during further design review and / or architectural plan review for building permit clearance.
- 3 Exhibit "A", sheet 4
A. The retail / commercial associated with the Village Green access shall not exceed a maximum height of 35', as measured to the top of the roof structure.
- 4 Exhibit "A", sheet 9. The School and Park sites access shall be further reviewed for compliance at which time the final design plans are submitted for building permit clearances or C.U.P. review.

By Inspector: Janna Masi

Date: 21-Mar-06



COUNTY OF LOS ANGELES
DEPARTMENT OF PARKS AND RECREATION
"Creating Community Through People, Parks and Programs"

Russ Guiney, Director

December 28, 2005

Mr. Paul McCarthy
Supervising Regional Planner
Land Divisions/Research
Department of Regional Planning
320 West Temple Street, Room 1346
Los Angeles, California 90012

Dear Mr. McCarthy:

**RIVER VILLAGE - VESTING TENTATIVE TRACT MAP (VTTM) 53108
CONDITIONS OF MAP APPROVAL
Regional Planning Map dated November 7, 2005
December 29, 2005 Subdivision Committee Meeting**

The Department's Conditions of Map Approval are listed below for the 1,444-residential unit River Village subdivision ("the project").

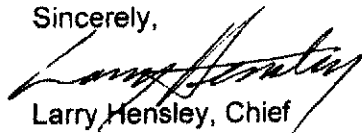
1. The basic Quimby park land obligation is **11.34** net acres of park land. This obligation will be fulfilled by the Developer conveying fee title to Lot 344 to the County as an improved "public park" (9.74-acre community park) in accordance with the conceptual plan and cost estimate enclosed in Developer's February 23, 2004, submittal to the Department; a 6.39-acre private park in Lot 337; recreational centers in lots 330 (0.82 net acres), 336 (3.44 net acres), and 340 (0.97 net acres), and a 3.10 net acre trail easement. If a shared recreational use arrangement for the public park is sought by Castaic School District (District), the recreational improvements on the shared use area (either park property or school district property) shall be visible from 'A' Street (River Village Drive) and the parking lot perpendicular to 'A' Street for the Department to approve the shared use area.
2. Developer may elect to receive Quimby credit for *Specific Plan* park improvements to the public park by giving the Department written notification thirty (30) days prior to Developer's Notice of Construction Commencement for the public park, in which case Developer shall pay prevailing wage to construct the park improvements and submit quarterly statements of costs for the Department's review and approval following the same submittal schedule specified for submitting building permit reports.
3. Developer shall receive a **24.46** Quimby land credit for the net acreage provided for the public park and private parks/recreational areas, and other recreational acreage permitted by the *Specific Plan* as shown in attached Specific Plan Table 5.4-2 ("Park and Recreation Improvement Summary") and sub-table for Local Park Acres Provided (Column D) prepared for Tract 53108. No Quimby credit will be given for improvements to private parks/recreational areas.

4. A carry forward of the 13.12-acre surplus Quimby credit from River Village to any other approved subdivision within the Newhall Ranch *Specific Plan* Area shall not result in a reimbursement to developer from County's Quimby funds or a return by County to developer of any public park land previously conveyed to County for developer's Newhall Ranch *Specific Plan* Area Quimby obligation.
5. Developer shall complete construction of the public park and convey it to the County by the time building permits are obtained for two-thirds of the residential units within the River Village subdivision (i.e., when 963 residential units are permitted). Developer shall submit quarterly reports to the Department that identify for each unit map within River Village the number of residential units for which building permits were issued for the quarter and cumulative to date, and which relate the number of residential units to owner, building number, building type (e.g., single family home, condominium, apartment) and lot number. The quarterly reports are due on the first County business day of January, April, July, and October of each year building permits are issued for River Village. This reporting requirement applies for the actual number and type of dwelling units constructed and for the duration of build out permitted by the approved tentative map. Failure to provide the Department with a report will result in the Department requesting the Department of Public Works to withhold further issuance of building permits for River Village until the respective report is received.
6. Prior to the Department clearing the final map for River Village, Developer shall enter into a Multiple Agreement and post Faithful Performance and Labor & Materials bonds with the Department for Developer's *Specific Plan* park improvements in accordance with updated cost estimates for said improvements.
7. Prior to County accepting title to the public park, a Landscape Lighting and Assessment District (LLAD) shall be created for the mutual benefit of Developer and the County to maintain and operate the park. When LLAD maintenance areas are planned on private, fee simple lots, LLAD easements must be recorded prior to clearance of final (unit) maps by the Department.
8. Developer is responsible for developing the public park in accordance with the *Specific Plan* park improvement plans approved by the Department, at no cost to the County, using standard construction activities and responsible contractors licensed by the State of California to perform this type of work. Sole responsibility for completion of the park improvements, and payment of all costs incurred, lies with Developer.
9. Developer shall obtain, coordinate and pay for all studies, permits, fees and agency inspections required to design and build the park and shall provide one (1) copy of all studies, permits, inspection reports, and written approvals to the Department's representative. Design and construction of the parks shall comply with all applicable federal, state, and local laws, rules, and regulations.
10. Developer shall provide County with certification that all public park playgrounds within River Village meet American Society for Testing and Materials (ASTM) and United States Consumer Product Safety Commission (USCPSC) standards.

11. Developer (or developer's design consultant) shall submit to the Department, public park plans and specifications for review and approval during the design development stage, fifty percent (50%), ninety percent (90%), and one hundred percent (100%) stages of completion of construction documents and, concurrent with the final grading plan submittal to the Department of Public Works, a grading plan (scale: 1 inch = 40 feet or as required by the Department) and specifications, including all grading, drainage, irrigation and planting improvements, utility locations and sizes required under County ordinances. The respective stage of each submittal shall be clearly labeled on the drawings. Plan submittals shall be made by giving the Department three (3) sets of drawings and a CD-ROM containing the drawings in AutoCad 2000 format. The Department shall have twenty-one (21) County business days from receipt of any construction document submittal to review and approve it; if the Department does not respond within said time period, the submittal shall be deemed approved by the Department. Any corrections or changes made by County during review of one stage shall be incorporated into a revision of the current drawings and specifications and resubmitted for County's approval of said stage prior to permission by County for Developer to proceed with the next stage.
12. Developer shall provide the Department with written Notice of Construction Commencement for the park site. The Construction Phase is defined as the period of time from said notice to the date the Department issues its Notice of Acceptance of Completed Park Improvements, inclusive of the 90-day plant establishment period.
13. Developer shall designate and identify a construction manager who will oversee construction of the public park. Developer's construction manager shall communicate by providing written documentation via facsimile or mail to County's representative and abide by County's requirements and direction to ensure acceptable park completion. The construction manager shall provide County with reasonable access to the public park sites and the park improvements for inspection purposes and at a minimum, shall initiate and coordinate the following inspections and approvals during the course of construction with not less than two County business days advanced notice of any request for inspection or approval: (1) contractor orientation/pre-construction meeting; (2) construction staking and layout; (3) progress/installation inspections to be scheduled on a weekly basis or as required to insure conformance with construction documents; (4) any and all required permit inspections; (5) irrigation mainline and equipment layout; (6) irrigation pressure test; (7) irrigation coverage test; (8) weed abatement after abatement cycle, to review degree of kill; (9) plant material approval; (10) plant material/Hydroseed/pre-maintenance inspection; (11) substantial completion and commencement of maintenance period; (12) final walk through and acceptance. Continued work without inspection and approval shall make Developer and its subcontractors solely responsible for any and all expenses incurred for required changes or modifications. County reserves the right to reject all work not approved in conformance with this condition.
14. During the construction period, the construction manager shall maintain a critical path method (CPM) schedule that shall be updated on a biweekly basis and available to the County for review.

15. Upon completing public park construction, Developer shall notify the Department in writing by submitting a Notice of Completion of Park Construction. Within thirty (30) days after receipt of said notice, County shall inspect the park and reasonably determine whether or not the park improvements have been constructed in accordance with the construction documents, and to a level of quality and workmanship for the Department to issue its Notice of Acceptance of Completed Park Improvements. If park construction is unacceptable, within fifteen (15) County business days after inspection, County shall provide Developer with a list of items that need to be corrected, after receipt of said list, in order for Department to issue its Notice of Acceptance of Completed Park Improvements, or issuance of said notice will be delayed until the items on the list are corrected.
16. Developer shall provide Department with two (2) sets of record drawings, maintenance manuals, and irrigation controller charts upon Department's Notice of Acceptance of Completed Park Improvements. These documents shall also be submitted on CD-ROM with the drawings in AutoCad 2000 format.
17. Developer shall convey the public park by recordable grant deed showing the fee vested with the County of Los Angeles, and free of all encumbrances except those that do not interfere with the use of the property for park or recreational purposes. Developer's designated title company shall provide the County with an ALTA title policy and shall record the park deed simultaneously to County's execution of a Certificate of Acceptance, and shall deliver the recorded deed to the Chief Administrative Office Real Estate Division, Property Management Section, 222 South Hill Street, Third Floor, Los Angeles, CA 90012.
18. Any major change proposed by the Developer to the public park location, shape, or size (not more than 2 acres variance) from the approved tentative tract or parcel map, shall be deemed a revision of the tentative tract or parcel map and shall require the filing of an amended or a revised map, as described in subsection B of Section 21.62.030 of the Los Angeles County Code.

Sincerely,



Larry Hensley, Chief
Planning Division

LH:JB (Newhall Ranch; 53108 River Village_12.28.05 rpd)

Attachments (2)

c: Keith Herren, Newhall Land
Carlos Brea, CAO Real Estate Division
Parks and Recreation (Gil Lopez, Larry Hensley, Kathleen Ritner, Les Seidman)



LOS ANGELES COUNTY
DEPARTMENT OF PARKS AND RECREATION
PARK OBLIGATION REPORT



Tentative Map # 53108 DRP Map Date: 11/07/2005 SCM Date: / / Report Date: 12/29/2005
Park Planning Area # 35A NEWHALL / VALENCIA Map Type: REV. (REV RECD)

Total Units **1,444** = Proposed Units **1,444** + Exempt Units **0**

Sections 21.24.340, 21.24.350, 21.28.120, 21.28.130, and 21.28.140, the County of Los Angeles Code, Title 21, Subdivision Ordinance provide that the County will determine whether the development's park obligation is to be met by:

- 1) the dedication of land for public or private park purpose or,
- 2) the payment of in-lieu fees or,
- 3) the provision of amenities or any combination of the above.

The specific determination of how the park obligation will be satisfied will be based on the conditions of approval by the advisory agency as recommended by the Department of Parks and Recreation.

Park land obligation in acres or in-lieu fees:

ACRES:	11.34
IN-LIEU FEES:	\$2,977,215

Conditions of the map approval:

See attached December 29, 2005 letter to Paul McCarthy, Supervising Regional Planner, Land Division Research, Department of Regional Planning for Conditions of Tentative Map Approval.

The park obligation for this development will be met by:

The dedication of 9.74 acres for public park purposes.
Provide 14.72 acres for private park purposes.

Trails:

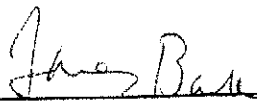
See also attached Trail Report. CASTAIC CREEK AND SANTA CLARA RIVER TRAILS.

See Conditions of the map approval above.

Contact Patrocenia T. Sobrepeña, Departmental Facilities Planner I, Department of Parks and Recreation, 510 South Vermont Avenue, Los Angeles, California, 90020 at (213) 351-5120 for further information or an appointment to make an in-lieu fee payment.

For information on Hiking and Equestrian Trail requirements contact Trail Coordinator at (213) 351-5135.

By:


James Barber, Advanced Planning Section Head

Supv D 5th
December 27, 2005 14:23:19
QMB02F.FRX



**LOS ANGELES COUNTY
DEPARTMENT OF PARKS AND RECREATION**



PARK OBLIGATION WORKSHEET

Tentative Map #	53108	DRP Map Date: 11/07/2005	SMC Date: / /	Report Date: 12/29/2005
Park Planning Area #	35A	NEWHALL / VALENCIA		Map Type: REV. (REV RECD)

The formula for calculating the acreage obligation and or In-lieu fee is as follows:

$$(P) \text{ people} \times (0.003) \text{ Goal} \times (U) \text{ nits} = (X) \text{ acres obligation}$$

$$(X) \text{ acres obligation} \times \text{RLV/Acre} = \text{In-Lieu Base Fee}$$

Where: P = Estimate of number of People per dwelling unit according to the type of dwelling unit as determined by the 2000 U.S. Census*. Assume * people for detached single-family residences; Assume * people for attached single-family (townhouse) residences, two-family residences, and apartment houses containing fewer than five dwelling units; Assume * people for apartment houses containing five or more dwelling units; Assume * people for mobile homes.

Goal = The subdivision ordinance allows for the goal of 3.0 acres of park land for each 1,000 people generated by the development. This goal is calculated as "0.0030" in the formula.

U = Total approved number of Dwelling Units.

X = Local park space obligation expressed in terms of acres.

RLV/Acre = Representative Land Value per Acre by Park Planning Area.

Total Units 1,444 = Proposed Units 1,444 + Exempt Units 0

	People*	Goal 3.0 Acres / 1000 People	Number of Units	Acre Obligation
Detached S.F. Units	3.23	0.0030	590	5.72
M.F. < 5 Units	2.29	0.0030	403	2.77
M.F. >= 5 Units	2.11	0.0030	451	2.85
Mobile Units	1.74	0.0030	0	0.00
Exempt Units			0	
Total Acre Obligation =				11.34

Park Planning Area = 35A NEWHALL / VALENCIA

Goal	Acre Obligation	RLV / Acre	In-Lieu Base Fee
@(0.0030)	11.34	\$262,541	\$2,977,215

Lot #	Provided Space	Provided Acres	Credit (%)	Acre Credit	Land
	Trails	3.10	100.00%	3.10	Private
330	Private Rec. Center	0.82	100.00%	0.82	Private
336	Private Rec. Center	3.44	100.00%	3.44	Private
337	Private Park	6.39	100.00%	6.39	Private
340	Private Rec. Center	0.97	100.00%	0.97	Private
344	Park Area	9.74	100.00%	9.74	Public
Total Provided Acre Credit:				24.46	

Acre Obligation	Public Land Crdt.	Priv. Land Crdt.	Net Obligation	RLV / Acre	In-Lieu Fee Due
11.34	9.74	14.72	(13.12)	\$262,541	(\$3,444,538)

DEVELOPMENT PLAN
2.8 RECREATION AND OPEN AREA

TABLE 2.8-1

PRELIMINARY PARK PROGRAM
Newhall Ranch Specific Plan

ESTIMATED QUIMBY REQUIREMENTS

Description/Category	Units		Avg. Hsehold Size		Assessment Factor		Obligation in Acres
Detached	9,305	x	3.17	x	0.003	=	88
Attached	11,580	x	2.38	x	0.003	=	83
Second Units	423	x	2	x	0.003	=	3
Total:	21,308						174

ESTIMATED QUIMBY CREDITS

Description/Category	Land		Improvements				Total Acreage
	Acres	Credit %	Quimby Acres	Imp Cost \$/SF	Improv. Costs	Acre Equiv.	
Parks:							
Neighborhood Parks ⁽¹⁾	50	100%	50	2.50	5,445,000	45	95
Community Parks ⁽¹⁾							
Active Area	58	100%	58	2.50	6,316,200	52	110
Passive Area	123	50%	62				62
Lake ⁽¹⁾	15	100%	15				15
Subtotal, Parks^{(1),(2)}	246		185		11,761,200	97	282
Trails:							
Regional River Trail	16	100%	16				16
Community Trails	39	100%	39	2.50	4,247,100	35	74
Local Trails (in Open Area)	13	(acreage included below)		1.00	566,280	5	5
Unimproved Trails (in High Country)	13	(acreage included below)		1.00	561,792	5	5
Subtotal, Trails	81		55		5,375,172	45	100
Major Open Areas:							
Golf Course	180	0%	0			0	0
High Country SMA ⁽³⁾	4,185	50%	2,093			0	2,093
River Corridor SMA ⁽³⁾	975	10%	98			0	98
Community Open Area ⁽³⁾ (Excl. Oak Valley Community Park)	869	10%	87			0	87
Subtotal, Major Open Areas	6,209		2,278			0	2,278
TOTAL CREDIT PROVIDED							2,650
Quimby Requirements							174
Excess							2,486

⁽¹⁾ County ordinance allows credit for improvements, land or a combination of both.

⁽²⁾ Parks such as private recreation centers (including improvements) within neighborhoods are also eligible for credit but cannot be quantified at this level of planning.

⁽³⁾ Credit for the River Corridor SMA and Open Area is calculated using a worst-case factor of 10%, which is lowest percent specified in the County ordinance. The County ordinance provides for a greater level of credit pending on slope ranging from a low of 10% to a high of 100%. In order to receive credit for land which has slope greater than 3%, the Director of Parks and Recreation must find that special circumstances exist that would make the acceptance of such land in the public interest. The Director may also give more credit than specified in the ordinance if it is found that a site contains exceptional visual, biotic or other natural resources. Such a case is the High Country SMA, which is exceptionally rich in both natural resources and recreational opportunities, and has been calculated at 50% credit.

**TABLE 5.4-2
PARK AND RECREATION IMPROVEMENTS SUMMARY**

RIVERWOOD	DEDICATION REQUIREMENTS			LOCAL PARK IMPROVEMENTS			Surplus (Deficit) (F - C)
	A Total Units	B Population Factor	C Local Park Requirement (A x B x .003)	D Local Park Acres Provided	E Local Park Improvements (\$)	F Total Acres Provided D+(E/126,000)	
1. Tract No. 53108 (River Village)							
A. Single-Family Detached Residences	590	3.23	5.72				N/A
B. Single-Family Attached Residences and Multi-Family with less than 5 Units/Building	403	2.29	2.77				N/A
C. Multi-Family with 5 or more Units/Building	451	2.11	2.85				N/A
Tract No. 53108 Total	1,444		11.34	24.46	\$0.00	24.46	13.12
VILLAGE TOTAL	1,444		11.34	24.46	\$ 0.00	24.46	13.12

TRACT NO. 53108 (RIVER VILLAGE) COLUMNS "D" AND "E" DETAIL

Lot No.	Unit Map	Phase No.	Category	Local Park Acres	Percent Credit	Local Park Acres Provided	Local Park Improvements (\$)
337			Private Park	6.39	100%	6.39	
344			Community Park	9.74	100%	9.74	
336			River Recreational Area	3.44	100%	3.44	
340, 330			Private Recreational Area	1.79	100%	1.79	
			West Recreation Center	0.97		0.97	
			East Recreation Center	0.82		0.82	
310-317, 392-402			River Trail	3.10	100%	3.10	
TOTAL				24.46		24.46	\$0.00



COUNTY OF LOS ANGELES
DEPARTMENT OF HEALTH SERVICES
Public Health

THOMAS L. GARTHWAITE, M.D.
DIRECTOR and CHIEF MEDICAL OFFICER

FRED LEAF
CHIEF OPERATING OFFICER

JONATHAN E. FIELDING, M.D., M.P.H.
Director of Public Health and Health Officer

Environmental Health
ARTURO AGUIRRE, Director

Bureau of Environmental Protection
Mountain & Rural/Water, Sewage & Subdivision Program
5050 Commerce Drive, Baldwin Park, CA 91706-1423
TEL (626) 430-5380 · FAX (626) 813-3016
www.lapublichealth.org/eh/progs/envirp.htm



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December 28, 2005

RFS No. 05-0031528

Tract Map No: 53108

Vicinity: Del Valle

Tentative Tract Map Date: November 7, 2005 (9th Revision)

The Los Angeles County Department of Health Services' conditions of approval for **Vesting Tentative Tract Map 53108** are unchanged by the submission of the revised map. The following conditions still apply and are in force:

1. Potable water will be supplied by the **Valencia Water Company**, a public water system, which guarantees water connection and service to all lots.
2. Sewage disposal will be provided through the public sewer and wastewater treatment facilities of the **Newhall Ranch Water Treatment Plant** as proposed.

If you have any questions or need additional information, please contact me at (626) 430-5380.

Respectfully,

Becky Valenti, E.H.S. IV
Mountain and Rural/Water, Sewage, and Subdivision Program



COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 890-4330

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN

RECEIVED
DEC 07 2006

December 4, 2006

Daniel Fierros, Regional Planning Assistant
Los Angeles County Department of Regional Planning
Impact Analysis Section
320 West Temple Street
Los Angeles, CA 90012

Dear Mr. Fierros:

OAK TREE PERMIT #00-196, LANDMARK VILLAGE (RIVER VILLAGE) PROJECT, TM #53108

We have reviewed the "Request for Oak Tree Permit #00-196. The project is located south of State Route 126 near the intersection of Chiquito Canyon Rd., north of the Santa Clara River and west of Interstate 5. The Oak Tree Report is accurate and complete as to the location, size, condition and species of the Oak trees on site. The term "Oak Tree Report" refers to the document on file by Impact Sciences the consulting arborist, dated June, 2006.

We recommend the following as conditions of approval:

OAK TREE PERMIT REQUIREMENTS:

1. This grant shall not be effective until the permittee and the owner of the property involved (if other than the permittee), have filed at the office of the Department of Regional Planning their affidavit stating that they are aware of and agree to accept all conditions of this grant.

Unless otherwise apparent from the context, the term "permittee" shall include the applicant and any other person, corporation or other entity making use of this grant.

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

AGOURA HILLS
ARTESIA
AZUSA
BALDWIN PARK
BELL
BELL GARDENS
BELLFLOWER

BRADBURY
CALABASAS
CARSON
CERRITOS
CLAREMONT
COMMERCE
COVINA

CUDAHY
DIAMOND BAR
DUARTE
EL MONTE
GARDENA
GLENORA
HAWAIIAN GARDENS

HAWTHORNE
HIDDEN HILLS
HUNTINGTON PARK
INDUSTRY
INGLEWOOD
IRVINDALE
LA CANADA FLINTRIDGE
LA HABRA

LA MIRADA
LA PUENTE
LAKEWOOD
LANCASTER
LAWNDALE
LOMITA
LYNWOOD

MALIBU
MAYWOOD
NORWALK
PALMDALE
PALOS VERDES ESTATES
PARAMOUNT
PICO RIVERA

POMONA
RANCHO PALOS VERDES
ROLLING HILLS
ROLLING HILLS ESTATES
ROSEMEAD
SAN DIMAS
SANTA CLARITA

SIGNAL HILL
SOUTH EL MONTE
SOUTH GATE
TEMPLE CITY
WALNUT
WEST HOLLYWOOD
WESTLAKE VILLAGE
WHITTIER

2. The permittee shall, prior to commencement of the use authorized by this grant, deposit with the County of Los Angeles Fire Department a sum of \$5000. Such fees shall be used to compensate the County Forester to cover expenses incurred while inspecting the project to determine the permittee's compliance with the conditions of approval.

The above fees provide for one (1) pre-construction meeting required to determine fencing placement in order to secure the protected zone of all remaining Oak trees, inspection of temporary fencing prior to the commencement of any construction and a subsequent five (5) year monitoring period requiring inspections until the conditions of approval have been met.

The Director of Regional Planning and the County Forester shall retain the right to make regular and unannounced site inspections.

3. Before commencing work authorized or required by this grant, the consulting arborist shall submit a letter to the Director of Regional Planning and the County of Los Angeles Fire Department, Forestry Division stating that he or she has been retained by the permittee to perform or supervise the work, and that he or she agrees to report to the Director of Regional Planning and the County Forester any failure to fully comply with the conditions of the grant.

The arborist shall submit at the end of each year an annual monitoring report. The report shall include a diagram showing the exact number and locations of all mitigation trees planted and describe their health, planting dates, any mortality and mitigation timeframe relating to permit compliance.

4. The permittee shall arrange for the consulting arborist or a similarly qualified person to maintain all remaining Oak trees on the subject property that are within the zone of impact as determined by the County Forester for the life of the Oak Tree Permit or the Conditional Use Permit.
5. The permittee shall install temporary chain-link fencing, not less than four (4) feet in height, to secure the protected zone of all remaining Oak trees on site to be determined prior to any grading. The fencing shall be determined and installed prior to grading or tree removal, and shall not be removed without approval of the County Forester. The term "protected zone" refers to the area extending five (5) feet beyond the dripline of the Oak tree (before pruning), or fifteen (15) feet from the trunk, whichever is greater.

6. Copies of the Oak Tree Report, Oak tree map, mitigation planting plan and conditions of approval shall be kept on the project site and available for review. All individuals associated with the project as it relates to the Oak resource shall be familiar with the Oak Tree Report, Oak tree map, mitigation planting plan and conditions of approval.

PERMITTED OAK TREE REMOVAL AND ENCROACHMENT:

7. This grant allows the removal of a total of sixty-seven (67) Oak trees. Sixty-three (63) trees are of the Oak genus (*Quercus agrifolia*) numbered : 8, 9, 10, 51, 60, 61, 63, 64, **83***, 84, 248, 249, 250, 335, 336, 337, **338***, 339, 340, 341, 342, 343, **344***, 345, 346, 347, 348, **349***, 350, 351, **352***, 354, 355, 356, **357***, 396, 397, 398, 400, 401, **492***, 594, 1588, 1589, 1590, 1592, 1594, 1596, 1598, 3073, **4003***, 4016, 4017, 4018, 4019, 4022, 4025, 4026, 4027, 4028, 4055, 4056, 4057. Four (4) trees are of the of the genus (*Quercus lobata*) numbered **87***, 1587, **1597***, and 1591 on the applicants site plan and Oak tree report. A total of ten (10) of these trees to be removed are identified as **Heritage*** (in bold with an asterisk*), having a diameter greater than 36 inches.

This grant allows encroachment within the protected zone of fourteen (14) trees of the Oak genus identified as Tree Numbers: 92, 93, 98, 99, 100, 439, 448, **488***, **489***, 498, **503***, 592, 1605, 4007 on the applicant's site plan map and Oak Tree Report. Three (3) of these trees are identified as **Heritage***. Trenching, excavation, or clearance of vegetation within the protected zone of an Oak tree shall be accomplished by the use of hand tools or small hand-held power tools. Any major roots encountered shall be conserved to the extent possible and treated as recommended by the consulting arborist.

8. In addition to the work expressly allowed by this permit, remedial pruning intended to ensure the continued health of a protected Oak tree or to improve its appearance or structure may be performed. Such pruning shall include the removal of deadwood and stubs and medium pruning of branches two (2) inches in diameter or less in accordance with the guidelines published by the National Arborist Association. Copies of these guidelines are available from the County of Los Angeles Fire Department, Forestry Division. In no case shall more than 20% of the tree canopy of any one (1) tree be removed.
9. Except as otherwise expressly authorized by this grant, the remaining Oak trees shall be maintained in accordance with the principles set forth in the publication, "Oak Trees: Care and Maintenance", prepared by the County of Los Angeles Fire Department, Forestry Division. A copy of the publication is enclosed with these conditions.

MITIGATION TREES:

10. The permittee shall provide mitigation trees of the Oak genus at a rate of two to one (2:1) trees for each tree removed and at a rate of ten to one (10:1) for each Heritage tree removed for a total of 214 mitigation trees.
11. Each mitigation tree shall be at least a 15-gallon specimen in size and measure one (1) inch or more in diameter one (1) foot above the base. Free form trees with multiple stems are permissible; the combined diameter of the two (2) largest stems of such trees shall measure a minimum of one (1) inch in diameter one (1) foot above the base.
12. Mitigation trees shall be at a ratio consistent with the species of Oaks removed for a total of one hundred ninety (190) Quercus agrifolia and twenty four (24) Quercus lobata of indigenous varieties grown from a local seed source.
13. Mitigation trees shall be planted within one (1) year of the permitted Oak tree removals. Additional mitigation trees shall be planted within one (1) year of the death of any tree, which results from its permitted encroachment. Mitigation trees shall be planted either on site or at an off-site location approved by the County Forester. Alternatively, a contribution to the County of Los Angeles Oak Forest Special Fund may be made in the amount equivalent to the Oak resource loss. The contribution shall be calculated by the consulting arborist and approved by the County Forester according to the most current edition of the International Society of Arboriculture's "Guide for Plant Appraisal."
14. The permittee shall properly maintain each mitigation tree and shall replace any tree failing to survive due to a lack of proper care and maintenance with a tree meeting the specifications set forth above. The five-year maintenance period will begin upon receipt of a letter from the permittee or consulting arborist to the Director of Regional Planning and the County Forester indicating that the mitigation trees have been planted. The maintenance period of the trees failing to survive five (5) years will start anew with the new replacement trees. Subsequently, additional monitoring fees shall be required.
15. All mitigation Oak trees planted as a condition of this permit shall be protected in perpetuity by the Los Angeles County Oak Tree Ordinance once they have survived the required maintenance period.

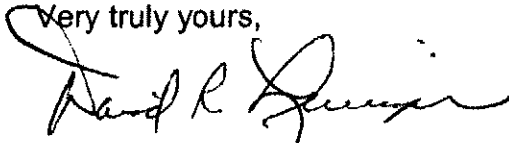
NON-PERMITTED ACTIONS AND VIOLATIONS:

16. Encroachment within the protected zone of any additional tree of the Oak genus on the project site is prohibited.
17. Should encroachment within the protected zone of any additional tree of the Oak genus on the project site not permitted by this grant result in its injury or death within two (2) years, the permittee shall be required to make a contribution to the Los Angeles County Oak Forest Special Fund in the amount equivalent to the Oak resource damage/loss. Said contribution shall be calculated by the consulting arborist and approved by the County Forester according to the most current edition of the International Society of Arboriculture's "Guide for Plant Appraisal."
18. No planting or irrigation system shall be installed within the dripline of any Oak tree that will be retained.
19. Utility trenches shall not be routed within the protected zone of an Oak tree unless the serving utility requires such locations.
20. Equipment, materials and vehicles shall not be stored, parked, or operated within the protected zone of any Oak tree. No temporary structures shall be placed within the protected zone of any Oak tree.
21. Violations of the conditions of this grant shall result in immediate work stoppage or in a notice of correction depending on the nature of the violation. A time frame within which deficiencies must be corrected will be indicated on the notice of correction.
22. Should any future inspection disclose that the subject property is being used in violation of any one of the conditions of this grant, the permittee shall be held financially responsible and shall reimburse the County of Los Angeles Fire Department, Forestry Division for all enforcement efforts necessary to bring the subject property into compliance.

Mr. Daniel Fierros
December 4, 2006
Page 6

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

A handwritten signature in black ink, appearing to read "David R. Leininger". The signature is fluid and cursive, with a large initial "D" and "L".

DAVID R. LEININGER, CHIEF, FORESTRY DIVISION
PREVENTION BUREAU

DRL:es

Enclosure



OAK TREES: Care and Maintenance

This Oak Tree Care and Maintenance Guide offers basic information and practical guidelines aimed at the preservation and continued health and survival of oak trees in the residential landscape.

Increasing pressure for development is changing the oak woodland of Los Angeles County. Heritage oaks which once survived in open rolling hills are now being preserved or replanted and incorporated into the community.

How do we protect these trees during the planning and development process, and ensure their survival once they are in the home garden?

The Oak Tree

Oak Trees in the residential landscape often suffer decline and early death due to conditions that are easily preventable. Damage can often take years to become evident, and by the time the trees show obvious signs of disease it is usually too late to help.

Improper watering, especially during the hot summer months, and disturbance to critical root areas are most often the causes. This booklet will provide guidelines on where these critical areas lie and ways to avoid disturbing them, as well as information on long-term care and maintenance of both natural and planted oaks. Lists of additional resources for more information and demonstration areas to visit are also included.

The Oak Tree Ordinance

The Los Angeles County Oak Tree Ordinance has been established to recognize oak trees as significant historical, aesthetic, and ecological resources. The goal of the ordinance is to create favorable conditions for the preservation and propagation of this unique and threatened plant heritage. By making this part of the development process, healthy oak trees will be preserved and maintained.

The Los Angeles County Oak Tree Ordinance applies to all unincorporated areas of the County. Individual cities may have their own ordinances, and their requirements may be different.

Permit Requirements:

Under the Los Angeles County Ordinance, a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone (see text) of any ordinance sized tree of the oak tree genus without first obtaining a permit.

Damage includes but is not limited to:

- Burning
- Application of toxic substances
- Pruning or cutting
- Trenching
- Excavating
- Paving
- Operation of machinery or equipment
- Changing the natural grade

Chapter 22.56.2050: Oak Tree Permit Regulations, Los Angeles County, Adopted: August 20, 1982. Amended: September 13, 1988.

For more information about the County Oak Tree Ordinance, visit the Forestry Division's website at:

http://lacofd.org/Forestry_folder/otordin.htm

Or contact:

Department of Regional Planning
320 W. Temple Street, 13th floor
Los Angeles, CA 90012-3284
(213) 974-6411
TDD: (213) 617-2292
<http://planning.co.la.ca.us>

Types of oaks commonly found in Los Angeles County:

Many kinds of oak trees are native to Los Angeles County. A few of the more common ones are shown below, but *all* oak trees are covered by the Oak Tree Ordinance.

Older oaks which have thrived under the natural rainfall patterns of dry summers and wet winters often can't handle the extra water of a garden setting. These trees must be treated with special care if they are to survive.

Those oaks that have been planted into the landscape or sprouted naturally tend to be more tolerant of watered landscapes. These vigorous young trees may grow 1½ to 4 feet a year in height under good conditions. Once established these trees would benefit from the same special care outlined in this guide.



Valley Oak
QUERCUS LOBATA

LARGE DECIDUOUS TREE 60'-75' HIGH, BROADLY SPREADING 50'-80' WIDE.

LEAVES: DEEP GREEN, 5"-4" LONG: PAPER-LIKE TEXTURE WITH DEEP ROUNDED LOBES ON THE LEAF EDGE.

TENDS TO FAVOR VALLEY BOTTOMS: FOR THIS REASON THE VALLEY OAK HAS DISAPPEARED FROM THE LANDSCAPE MORE RAPIDLY, IMPACTED SEVERELY BY AGRICULTURE AND URBAN DEVELOPMENT.



Coast Live Oak
QUERCUS AGRIPOPIA

LARGE EVERGREEN TREE WITH A BROAD, ROUND SHAPE AND LARGE LIMBS. 30'-70' HIGH, 35'-80' WIDE.

LEAVES: GLOSSY GREEN, 1"-5" LONG: SPINY, ROUNDED, AND HOLLY-LIKE BUT DISTINCTLY CUPPED OR CURLED UNDER AT THE EDGES.



Interior Live Oak
QUERCUS WIGLIZENII

EVERGREEN TREE 30'-75' HIGH OR A SHRUB 8'-10' HIGH IN CHAPARRAL AREAS. HAS A FULL, DENSE ROUNDED SHAPE, NOT BROAD WITH LARGE LIMBS LIKE A COAST LIVE OAK. THEY TEND TO GROW IN CLUMPS RATHER THAN AS A SINGLE TREE.

LEAVES: DARK GREEN, 1"-4" LONG. EDGES EITHER SMOOTH OR SPINY, BUT ALWAYS FLAT— NOT CURLED UNDER.

OTHER COMMON OAKS:

CALIFORNIA BLACK OAK: *QUERCUS KELLOGGII*
CANYON LIVE OAK: *QUERCUS CHRYSOLEPIIS*
ENGELMANN OAK: *QUERCUS ENGELMANNII*

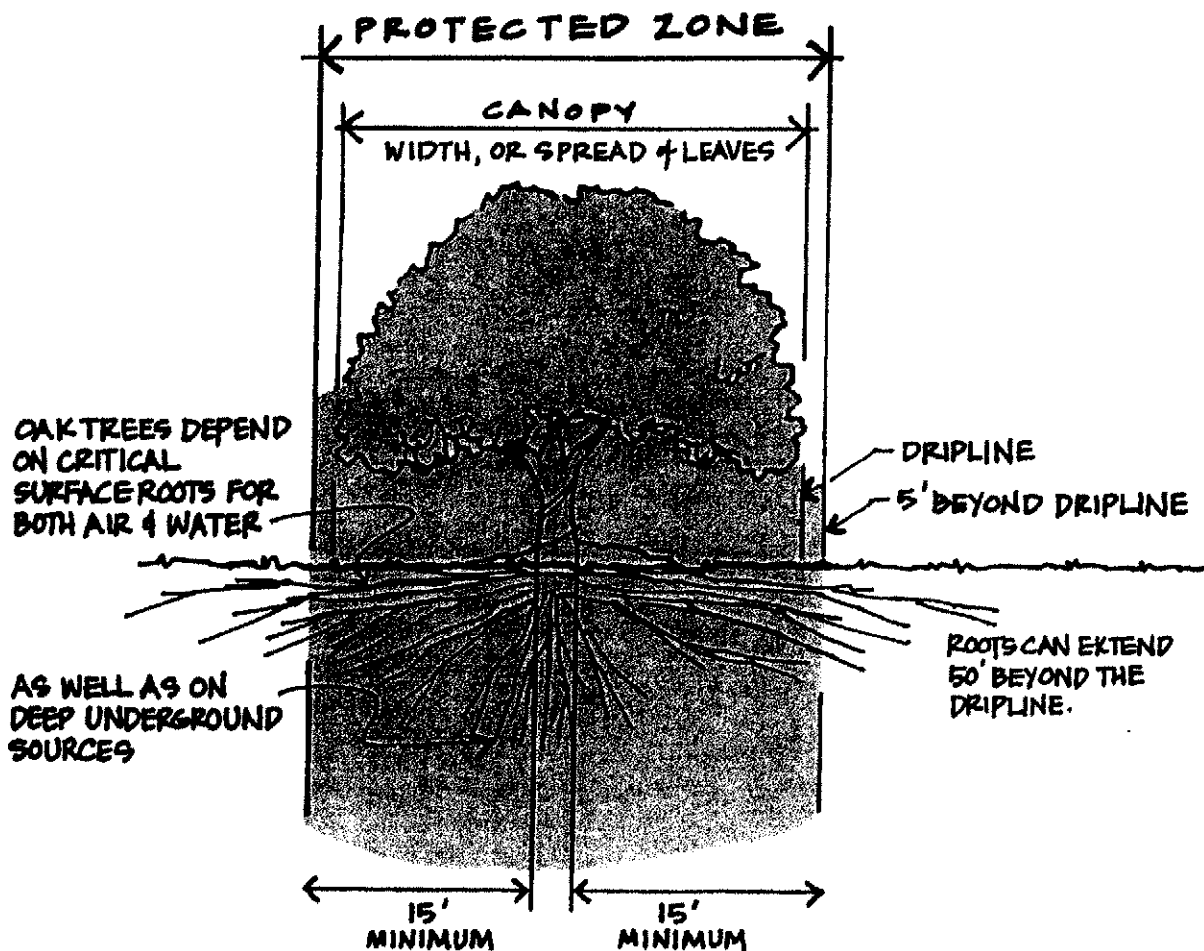
THE PROTECTED ZONE

The *protected zone* defines the area most critical to the health and continued survival of an oak tree. Oaks are easily damaged and very sensitive to disturbances that occur to the tree or in the surrounding environment.

The root system is extensive but surprisingly shallow, sometimes radiating out as much as 50 feet beyond the spread of the tree leaves, or canopy. The ground area at the outside edge of the canopy, referred to as the *dripline*, is especially important: the tree obtains most of its surface water and nutrients here, and conducts an important exchange of air and other gases.

The protected zone is defined in the Oak Tree Ordinance as follows:

"The Protected Zone shall mean that area within the dripline of an oak tree and extending there from to a point at least 5 feet outside the dripline or 15 feet from the trunk, whichever distance is greater."



CONSTRUCTION ACTIVITY WITHIN THE PROTECTED ZONE

Changes in Grade

Any change in the level of soil around an oak tree can have a negative impact. The most critical area lies within 6' to 10' of the trunk: no soil should be added or scraped away. Water should drain away from this area and not be allowed to pond so that soil remains wet at the base.

Retaining walls designed to hold back soil above or below an existing tree should be avoided if at all possible, especially within the protected zone. These types of structures cause critical areas at the dripline to be buried, or require that major roots be severed. Water trapped at the base of the tree could lead to root rot or other impacts, and to the decline and premature death of a highly valued landscape tree.

Construction activities outside the protected zone can have damaging impacts on existing trees. Underground water sources can be cut off due to falling water tables, or drainage may be disrupted.

Trenching

Digging of trenches in the root zone should be avoided. Roots may be cut or severely damaged, and the tree can be killed.

If trenches must be placed within the protected zone, utilities can be placed in a conduit, which has been bored through the soil, reducing damage to the roots. Insist that as many utilities as allowed be placed in a single trench, instead of the common practice of digging a separate trench for each individual line.

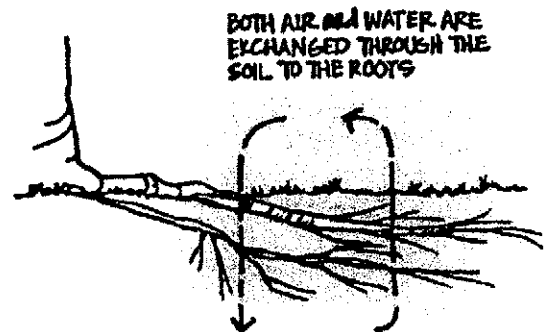
Trenching can also be accomplished using hand tools or small hand held power equipment to avoid cutting roots. Any roots exposed during this work should be covered with wet burlap and kept moist until the soil can be replaced.

Soil Compaction and Paving

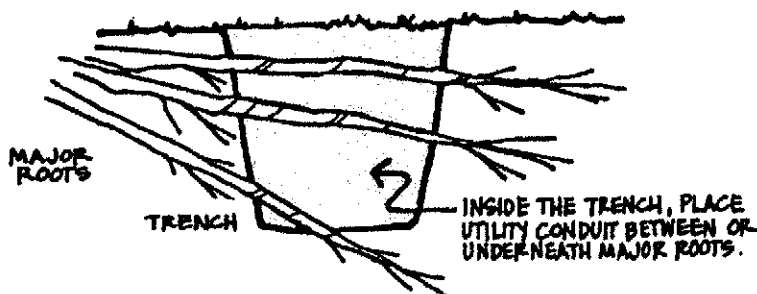
The roots depend upon an important exchange of both water and air through the soil within the protected zone. Any kind of activity that compacts the soil in this area blocks this exchange and can have serious long-term negative effects on the tree.

If paving material must be used, some recommended surfaces include brick paving with sand joints, or ground coverings such as wood chips (note the advantages of natural materials for providing nutrients under mulching).

SOIL COMPACTION



TRENCHING



MAINTENANCE

Watering

The key is prevention – **do not over water**. Improper watering is often overlooked as the cause of tree death because it can take years for the damage to show. Once the tree shows obvious signs of decline, it is often too late to correct the problem.

The seasonal weather pattern for this region is one of dry summers and winter rain. Oak trees are naturally drought tolerant and adapted to this cycle. If the tree is vigorous and thriving it should not require any additional water.

If the natural source of surface or underground water has been altered, some supplemental water may be necessary, but proceed with caution. The goal of any watering schedule for oak trees should be to supplement natural rainfall and it should occur only when the tree would normally receive moisture. This might be in the winter, if rains are unusually late, or in spring if rainfall has been below normal levels.

Over watering, especially during the summer months, causes a number of problems which can lead to decline and eventual death of the tree. It creates ideal conditions for attacks of Oak Root Fungus by allowing the fungus to breed all year. In addition, both evergreen and deciduous oaks grow vigorously in the spring and naturally go dormant in the summer. Extra water only encourages new tip growth which is subject to mildew. Oaks need this period of rest.

Newly planted oaks may need supplemental watering during their first few summers. After they become established water should be applied according to the previous guidelines.

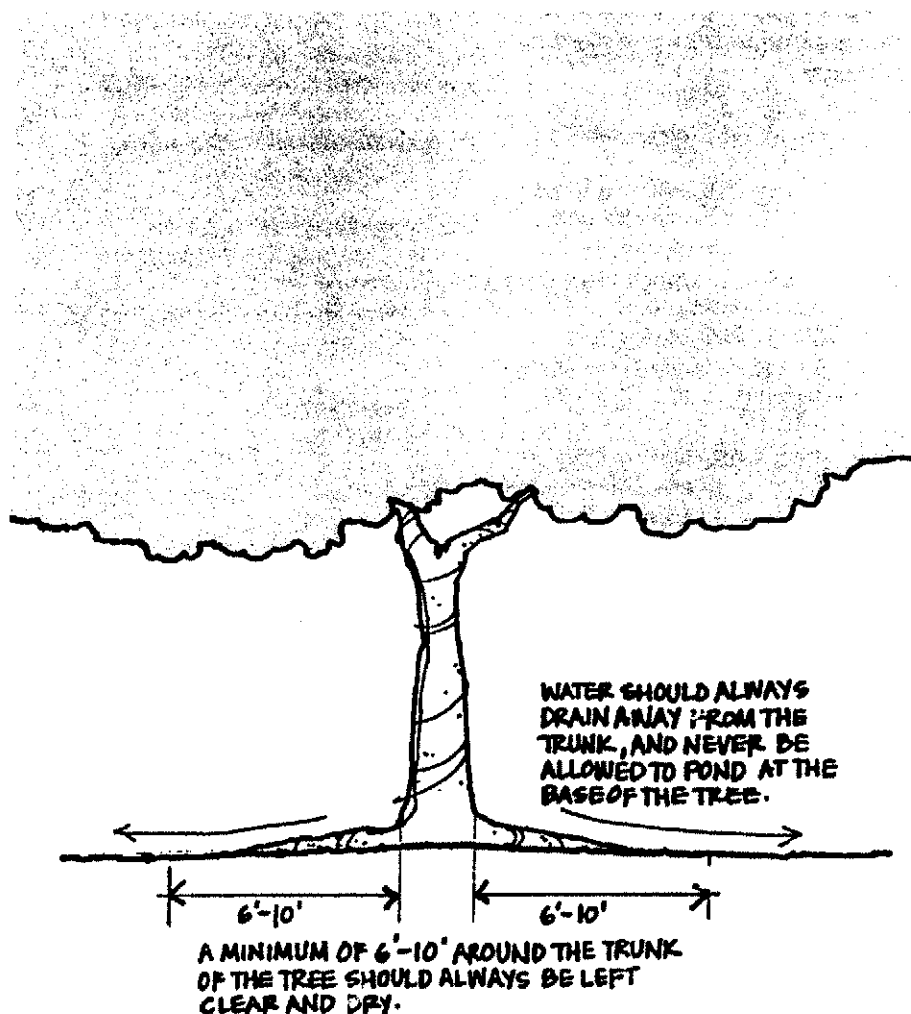
Pruning

For oak trees the periodic removal of dead wood during periods of tree dormancy should be the only pruning needed. Any cutting of green wood opens scars that could allow the entry of organisms or disease.

Before pruning obtain the advice of a certified arborist or other professional and consult the local city or county where the tree is located to find out what regulations apply. Pruning of both live and dead wood can sometimes require a permit.

Mulching

Leaf litter from the tree is the best mulch and should be allowed to remain on the ground within the protected zone. Crushed walnut shells or wood chips can be used, but the oak leaves that drop naturally provide the tree with a source of nutrients. Avoid the use of packaged or commercial oak leaf mulch which could contain Oak Root Fungus. Redwood chips should not be used due to certain chemicals present in the wood.



Disease and Pests

Trees that are stressed, especially because of improper watering practices, are prone to certain diseases and attacks by pests.

The most damaging of these diseases is the Oak Root Fungus *Armillaria mellea*. Occurring naturally in the soil, the fungus thrives under wet conditions and dies back in the summer when soils dry out. This is why summer watering of oaks can be a deadly practice. As noted in the watering guidelines, wet soil in the summer allows the fungus to grow all year. As the population grows, their natural food sources are depleted and they begin feeding on oak tree roots. The fungus does not require an open wound in the tree to gain entry.

Indications of the fungus include:

- die back of branches or tips.
- honey colored fungus at or near the root crown.
- white fan-like fungus between wood and bark.
- the presence of black, shoestring-like growths in the soil.

Once the tree begins to show obvious signs of infection treatment is generally ineffective. The best treatment is to *avoid* the conditions that lead to Oak Root Fungus infections.

Pit Scale, Oak Moth, and other pests: any significant changes in leaf color, branch die back, presence of black sooty materials on leaves or other changes should be noted. Seek the advice of a professional forester, arborist, farm advisor or other expert before the application of any pesticides on an oak tree.

Planting Underneath Oaks

The natural leaf litter is by far the best ground cover within the protected zone. If plants must be placed, the following guidelines should be followed:

There should be no planting within a minimum 6 to 10 feet of the trunk.

Avoid plants that require any supplemental water once established.

Choose plants suited for "dry shade." Those listed in the box below offer some good choices. To see some examples of how these plants have been used under oaks refer to the Additional Resources section on the following page.

PLANTS TO CONSIDER:

Plant Name	Description
<i>Arctostaphylos densiflora</i> 'Howard McMinn' Manzanita	3' high, 6' wide. Toughest of available forms. Whitish-pink flowers.
<i>Arctostaphylos edmundsii</i> Little Sur Manzanita	1-2' high, 4-5' wide. Tolerant of full shade.
<i>Arctostaphylos hookeri</i> Monterey Carpet Manzanita	1-2' high, spreading to 12' wide by rooting branches. White to pink flowers.
<i>Ceanothus griseus horizontalis</i> Carmel Creeper	Less than 2 1/2' tall, low & creeping. Clusters of small blue flowers.
<i>Heuchera</i> spp. Coral Bells	2-4' mound. Flowers on an upright stem 2-3' high and spotted with red or pink.
<i>Mahonia aquifolium compacta</i> Oregon Grape	2-4' high, spreading by underground roots. Bright yellow flower clusters.
<i>Ribes viburnifolium</i> Evergreen or Catalina Currant	2-3' high, spreading to 12' wide. Flowers pink to red in small clusters.

NOTES:

Before deciding on plants, check a source such as the Sunset Western Garden Book to determine which plants will grow in your area.

When choosing shade tolerant plants, consider that the ground under the south side of the tree will get more sunlight while the northern side will tend to remain more deeply shaded.

ADDITIONAL RESOURCES and Places to Visit

Public Agencies

County of Los Angeles Fire Department
Prevention Bureau, Forestry Division
5823 Rickenbacker Road, Rm #123
Commerce, CA 90040-3027
(323) 890-4330
<http://lacofd.org/forestry.htm>

University of California
Integrated Hardwood Range Management Program
163 Mulford Hall, Berkeley, CA 94720-3114
<http://danr.ucop.edu/ihmp>

Private Organizations

The Theodore Payne Foundation
10459 Tuxford Street
Sun Valley, CA 91352-2126
(818) 768-1802
www.theodorepayne.org

California Native Plant Society
1722 J Street, Suite 17
Sacramento, CA 95814-3033
(916) 447-2677
www.cnps.org

The California Oak Foundation
1212 Broadway, Suite 810
Oakland, CA 94612-1810
(510) 763-0282
www.californiaoaks.org

Arboreturns and Botanic Gardens

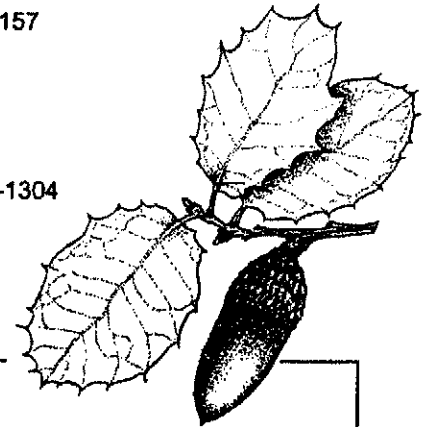
Los Angeles County Arboreta and Botanic Gardens
301 N. Baldwin Ave.
Arcadia, CA 91007-2697
(626) 821-3222
www.arboretum.org

Los Angeles County South Coast Botanic Garden
26300 Crenshaw Blvd.
Palos Verdes Peninsula, CA 90274-2515
(310) 544-6815
www.southcoastbotanicgarden.org

Los Angeles County Descanso Gardens
1418 Descanso Drive
La Canada-Flintridge, CA 91011-3102
(818) 949-4200
www.descansogardens.org

Rancho Santa Ana Botanic Garden
1500 North College
Claremont, CA 91711-3157
(909) 625-8767
www.rsabg.org

The Lummis Home
200 E. Avenue 43
Los Angeles, CA 90031-1304
(213) 222-0546



Publications

Compatible Plants Under and Around Oaks. Bruce W. Hagen... [et al]. The California Oak Foundation. 2000.

Growing California Native Plants. Marjorie G. Schmidt, Univ. California Press. 1981.

Illustrated Guide to the Oaks of the Southern Californian Floristic Province. Fred M. Roberts. FM Roberts Publications. 1996.

Living Among the Oaks: A Management Guide for Landowners. University of California Integrated Range Management Program. 1995.

Oaks of California. Bruce M. Pavlik...[et al]. Cachuma Press & the California Oak Foundation. 1995.

Proceedings of the Fifth Symposium on Oak Woodlands: Oaks in California's Changing Landscape. GTR PSW-GTR-184. Forest Service, U.S. Department of Agriculture. 2001.
Available from the University of California Integrated Hardwood Range Management Program.

Regenerating Rangeland Oaks in California. University of California Integrated Range Management Program. 2001.



County of Los Angeles Fire Department Forestry Division

County of Los Angeles Board of Supervisors

Gloria Molina, First District
Yvonne Brathwaite Burke, Second District
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County of Los Angeles Fire Department

P. Michael Freeman, Fire Chief

Brush Clearance Unit
605 N. Angeleno Avenue
Azusa, CA 91702-2904
(626) 969-2375

Camp 17
6555 Stephens Ranch Road
La Verne, CA 91750-1144
(909) 593-7147

Environmental Review Unit
12605 Osborne Street
Pacoima, CA 91331-2129
(818) 890-5719

Fire Plan/Interpretive Unit
12605 Osborne Street
Pacoima, CA 91331-2129
(818) 890-5783

Fuel Modification Unit
605 N. Angeleno Avenue
Azusa, CA 91702-2904
(626) 969-5205

Henninger Flats Forestry Unit
2260 Pinecrest Drive
Altadena, CA 91001-2123
(626) 794-0675

Lake Hughes Forestry Unit
42150 N. Lake Hughes Road
Lake Hughes, CA 93532-9706
(661) 724-1810

Malibu Forestry Unit
942 N. Las Virgenes Road
Calabasas, CA 91302-2137
(818) 222-1108

San Dimas Forestry Unit
1910 N. Sycamore Canyon Road
San Dimas, CA 91773-1220
(909) 599-4615

Saugus Forestry Unit
28760 N. Bouquet Canyon Road
Saugus, CA 91390-1220
(661) 296-8558

Vegetation Management Unit
12605 Osborne Street
Pacoima, CA 91331-2129
(818) 890-5720

**GENERAL PLAN, SANTA CLARITA VALLEY AREA AND SPECIFIC PLAN
AMENDMENT
BURDEN OF PROOF**

Request

Newhall Land is requesting an amendment to the Los Angeles County General Plan, the Santa Clarita Valley Area-wide Plan (SCVAP), and the Newhall Ranch Specific Plan to modify the existing "secondary highway" designation for the "A" Street/Wolcott Road (also referred to as the Franklin Avenue extension), located between Long Canyon Road and SR-126, within the Newhall Ranch Specific Plan, which was approved by the County on May 27, 2003. The proposed amendment would reclassify "A" Street/Wolcott Road from a secondary highway to a collector street, and result in the removal of "A" Street/Wolcott Road from the General Plan's "Master Plan of Highways," since collector streets are not shown on this policy map. The proposed amendment would also result in the removal of "A" Street/Wolcott Road from the Circulation Plan of the SCVAP and would modify the street's designation on the approved Newhall Ranch Specific Plan's "Mobility Plan," on the Specific Plan's "Master Circulation Plan" exhibit, and on accompanying cross-sections.

The requested amendment is necessary to achieve a street designation that is safest, most consistent with, and most appropriate for the level of permitted development and anticipated circulation requirements under the "Traditional Neighborhood Development" (TND) land-use plan for the Landmark Village development within the Newhall Ranch Specific Plan. Since the street's original classification as a secondary highway, changes in circumstances have occurred to render the existing street classification inappropriate, unnecessary, and potentially unsafe for the current type and level of development proposed.

Background

In 1994, Newhall Land filed its entitlement application for the future development of Newhall Ranch, including the Newhall Ranch Specific Plan (NRSP), with the Department of Regional Planning (DRP). Among the entitlement applications submitted concurrently with the NRSP were requests for amendments to the Los Angeles County General Plan, the SCVAP, and the Newhall Ranch Specific Plan, to establish what is now referred to as "A" Street/Wolcott Road as a secondary highway within the future Landmark Village community. At the time, the secondary highway designation was appropriate based on the projected future traffic demands on this street segment. The Specific Plan proposed a maximum of 24,700 residential dwelling units and a total of approximately 5.7 million square feet (sf) of non-residential development within Newhall Ranch. Of those totals, 1,750 dwelling units and 1 million sf of non-residential floor-area were proposed for the portion of Newhall Ranch adjacent to and containing the proposed "A" Street and Wolcott Road. This Newhall Ranch community, referred to as "Landmark Village," is the area within Vesting Tentative Tract Map No. 53108.

Based on the proposed development for Landmark Village (1,750 dwelling units and 1 million sf of non-residential uses) and Newhall Ranch overall, future traffic volumes on "A" Street/Wolcott Road were projected to equal approximately 30,000 average daily trips (ADTs). (Austin-Foust

Associates, *Newhall Ranch Traffic Analysis*, July 1996.) This level of traffic warranted designation of the street as a secondary highway, which provides traffic capacities of 32,000 ADT's.

In October 1996, the Regional Planning Commission held its first meeting regarding the Newhall Ranch Specific Plan and directed Newhall Land to reduce the overall scale and intensity of proposed development. Newhall Land revised the Specific Plan to provide for a reduced number of proposed dwelling units and a lower level of non-residential development. In December 1997, the Regional Planning Commission approved the NRSP with the scaled-back development proposal. The Board of Supervisors further reduced the level of development permitted by the Specific Plan during its reviews in 1998 and 2003.

As a result of these changes to Newhall Ranch, the approved Specific Plan now permits a maximum of up to 20,885 residential dwelling units and a maximum of 5.5 million square feet of non-residential uses. This represents a reduction of approximately 15 percent from the 24,700 dwelling units originally proposed, and a decrease of approximately 3 percent in permitted non-residential development from that originally requested in 1994. For the Landmark Village community of Newhall Ranch, the maximum number of residential units was reduced from 1,750 dwelling units to a maximum of up to 1,444 dwelling units. This represents a reduction of approximately 17 percent in permitted residential development. (There was no change to the permitted non-residential development at Landmark Village.)

In addition to the general reduction in the scale of development and number of permitted residential units and non-residential floor-area, another significant change in circumstances has occurred since the development plan was first submitted in 1994 that warrants a "downgrading" of "A" Street/Wolcott Road from a secondary highway to a collector street classification. In its more detailed development plan for Landmark Village prepared following approval of the Specific Plan, Newhall Land has chosen a TND land-use plan for Landmark Village, which emphasizes pedestrian safety, comfort and the concept of "walkability." In summary, the land plan has been developed so that key community features, such as parks, schools and shopping, are within a reasonable walking distance from most homes. In order for the land plan to be effective, streets must be designed to promote pedestrian safety and prevent excessive traffic (including "cut-through" traffic) and unsafe vehicle speeds. In fact, the failure to appropriately match street design to the land plan could result in increased risk of accidents, greater public liability, and degraded pedestrian safety.

As part of this TND approach, the intended function and design of "A" Street/Wolcott Road, has changed over the years. "A" Street/Wolcott Road was originally conceived as an arterial highway extension of Franklin Avenue, in the Commerce Center area northeast of Landmark Village, connecting with Long Canyon Road. Under the TND approach, the function of "A" Street/Wolcott Road would be limited to providing connectivity between Landmark Village neighborhoods and from the local streets to the arterial highway system. In this way, "A" Street/Wolcott Road would discourage "cut-through" traffic as an alternative to SR-126. The street design was adjusted to match this shift in intended function. The alignment was made curvilinear, lengthening the total roadway distance; traffic-calming design features such as a

periodic landscaped median, curb bulb-outs, and on-street parking were incorporated; and modern roundabouts are proposed.

With the reduced scale of development permitted by the revised NRSP and the shift in the street's intended function as part of the TND land plan, projected traffic volumes on "A" Street/Wolcott Road may now be accommodated by a collector street, which has a capacity of approximately 10,000 ADT. Traffic volumes on "A" Street/Wolcott Road are projected to be less than 10,000 ADT's for all but a short segment on the west end, which is proposed to be served by a higher-capacity, four-lane section providing adequate capacity. (Austin-Foust Associates, *Landmark Village Traffic Impact Analysis*, October 2003.)

In summary, a change in street classification for "A" Street/Wolcott Road from a four-lane secondary highway to a collector street is appropriate and warranted because of the reduction in proposed development, the implementation of a TND land-use plan, and the resulting decrease in projected traffic volumes. Projected traffic volumes would be adequately served by a collector street designation, and the existing secondary highway designation would provide unnecessarily excessive capacity. Furthermore, requiring the secondary highway could result in the potential for increased vehicular speeds under the proposed TND land plan, while the collector street would be the appropriate context-sensitive designation.

Justification

Due to the changes in circumstances since the Newhall Ranch Specific Plan and accompanying entitlements were first filed and approved, as detailed above, the existing secondary highway street classification is no longer appropriate for "A" Street/Wolcott Road. In addition to the justification provided above, the following four responses must be demonstrated in the affirmative in support of this request for a General Plan/Specific Plan Amendment.

Response No. 1

A need for the proposed General Plan Amendment exists because:

The proposed General Plan/Specific Plan Amendment is necessary and appropriate to provide a street classification that corresponds with the projected level of traffic demand, while at the same time providing a safe pedestrian environment consistent with the adjacent land-use plan. Without the requested General Plan/Specific Plan amendment, the street classification would require that "A" Street/Wolcott Road be improved to provide excessive capacity, with more than three times the capacity (32,000 ADT's) of the projected future volumes (fewer than 10,000 ADT's). In addition, requiring "A" Street/Wolcott Road to be built to secondary highway standards while its functional use is as a collector street providing connectivity between neighborhoods and the local street system would result in the potential for unsafe conditions, including increased frequency of accidents, increased severity of injury and property damage/loss, and the potential for increased public liability. These safety and liability risks of maintaining the secondary highway designation in lieu of the requested collector street classification are discussed in more detail in Response No. 4, below.

Response No. 2

The particular amendment proposed is appropriate and proper because:

As noted above, the requested collector street designation, with a capacity of approximately 10,000 ADT's, is appropriate for the projected traffic demand of fewer than 10,000 ADT's. In addition, the collector street designation is the most appropriate choice in the context of the proposed TND land-use plan for Landmark Village. The TND land-use plan places importance on pedestrian safety and comfort, as community uses, such as schools, recreation, and shopping, are located within walking distance of most residences. The higher-speed, higher-volume secondary highway would be inconsistent with the land-use plan as well as providing traffic capacity far in excess of projected demand.

Response No. 3

Modified conditions warrant a revision to the County of Los Angeles General Plan because:

As discussed above, the following are the key changes in circumstances that result in the need for the requested General Plan/Specific Plan Amendment:

1. The level of permitted development, including the number of homes and the amount of proposed non-residential floor-area, has been scaled back significantly from the original Newhall Ranch proposal, in general, and in Landmark Village, specifically.
2. Following approval of the Newhall Ranch Specific Plan, Newhall Land selected a "Traditional Neighborhood Development" land-use plan for Landmark Village, which would change the intended function of "A" Street/Wolcott Road from a secondary highway – as originally planned, providing a connection from Commerce Center, on the northeast, to the western portion of Landmark Village and areas of Newhall Ranch to the south – to a collector street intended to provide internal connectivity within Landmark Village only, between neighborhoods and connecting to the local street system. The change in intended street function, as implemented in the curvilinear street design with traffic-calming features, would eliminate "cut-through" traffic. The TND land-use plan would also reduce the number of vehicle trips generated from the project, by encouraging residents to walk to near-by destinations.
3. The reduced level of permitted development, combined with the selection of a "TND" land-use plan, have significantly reduced the projected traffic levels on "A" Street/Wolcott Road. The projected traffic levels on "A" Street/Wolcott Road were originally estimated at approximately 30,000 ADT's, which required a secondary highway classification. Under the proposed Landmark Village development, the projected traffic levels have been significantly reduced to approximately 10,000 ADT's or less, which justifies the change in classification from a secondary highway to a collector street.

Response No. 4

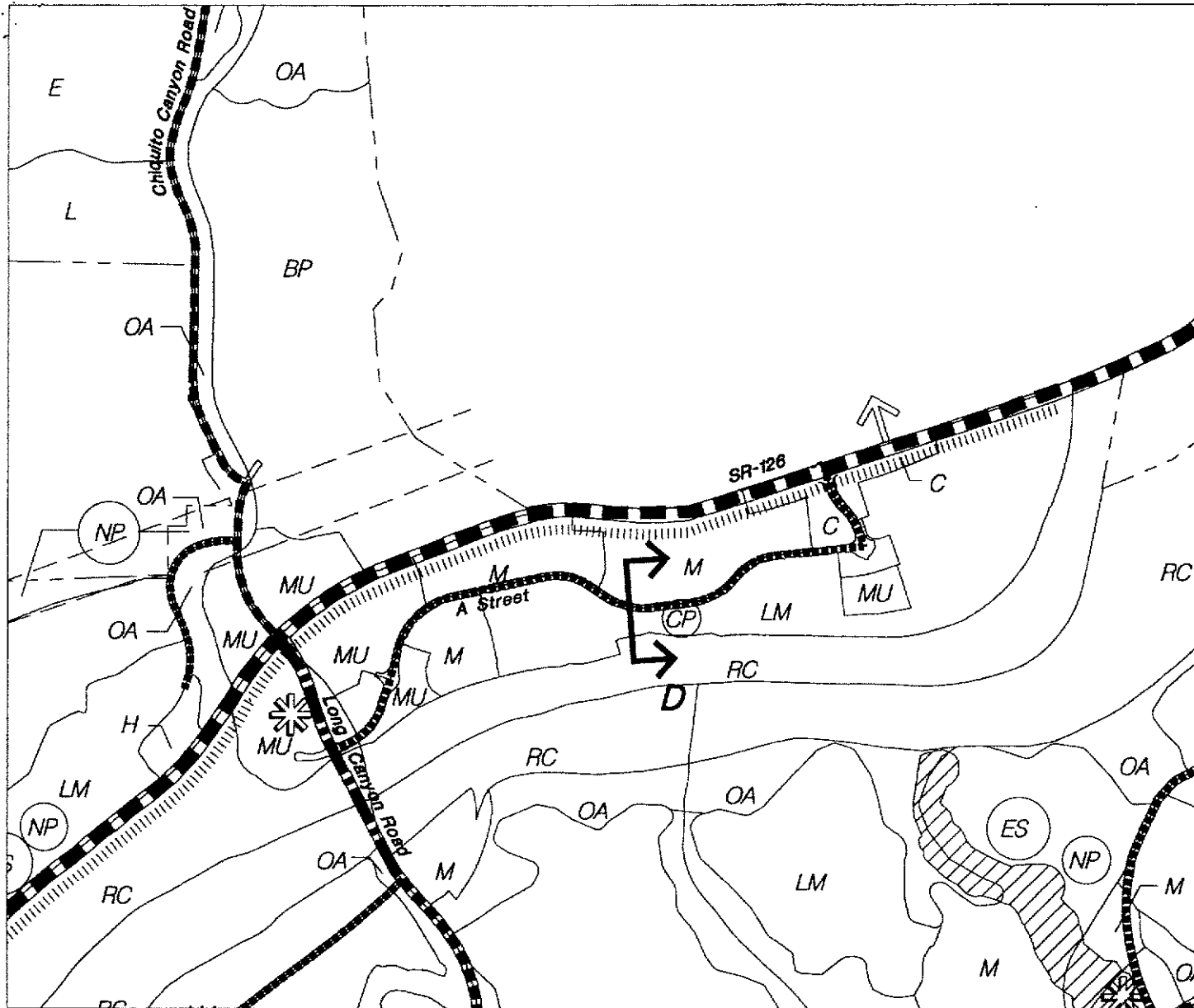
Approval of the proposed General Plan Amendment will be in the interest of public health, safety, and general welfare and in conformity with good planning practices because:

Approval of the requested General Plan/Specific Plan Amendment will result in significant contributions to the public health, safety and general welfare, including the following:

1. The requested collector street classification will result in safer conditions when compared to the existing secondary highway designation.
 - a. Based on research compiled by Newhall Land (*Traditional Neighborhood Development at Landmark Village, Newhall Ranch: The Role of Alternative Street Design in Traditional Neighborhood Development, Volumes I and II*, November, 2001; March, 2002), the number of traffic accidents would be reduced with the requested street designation, as demonstrated below.
 - b. In addition, as noted in the research referenced above, accident severity would also be diminished. Injuries to both motorists and pedestrians would be less severe under the requested street classification, generating fewer fatalities and less-severe injuries.
 - i. Motor vehicle accidents are the leading cause of accidental death in California, and 20 percent of accidents involve pedestrians. (*Dangerous by Design: Pedestrian Safety in California*, Surface Transportation Policy Project, and September 2000.)
 - ii. The second-leading cause of death for California children (ages 5-12) is pedestrian fatality. (*Ibid.*)
 - iii. There is a direct correlation between roadway width and vehicle speeds. (*Residential Street Typology and Injury Accident Frequency*, Swift, 2001.)
 - iv. Slower vehicle speeds result in greater stopping distance, a lower frequency of accidents, and reduced severity of injury from the smaller number of resulting accidents. (*Traditional Neighborhood Development Street Design Guidelines*, Institute of Transportation Engineers, October, 1999.)
2. By enhancing the pedestrian environment, the requested street classification would promote a healthier community.
 - a. The less-intrusive collector street classification would contribute toward the TND's goal of promoting walking as an alternative to driving to community destinations. For example, safe streets would allow children to walk to neighborhood schools. Studies show that walkable communities promote their residents' health. ("Healthy Neighborhood Streets – The Key to Stronger Communities", *On Common Ground*, Winter 2002.)
 - b. The safer, more comfortable pedestrian environment would also promote walking, jogging, bicycling and other recreational opportunities.

3. The requested street classification would promote the general welfare with enhanced property benefits:
 - a. Property owners would benefit from less property damage and fewer injuries associated with motor-vehicle accidents, as noted above.
 - b. Property owners could benefit from alternative financing programs provided to TND communities; such as the "location-efficient mortgage"¹ that recognizes the benefits of a safe and walkable community.
 - c. Studies show that property values are enhanced in "smart growth" communities such as a TND, when compared with the values of homes in conventional subdivisions. (Smart Growth Gateway, www.smartgrowthgateway.org.)
4. The requested amendment is consistent with good planning practices.
 - a. This request is consistent with the following American Planning Association's "Principals for Smart Growth:"
 - i. Create walkable neighborhoods;
 - ii. Foster distinctive, attractive places with a strong sense of place;
 - iii. Provide a variety of transportation choices; and
 - iv. Take advantage of compact building design.
 - b. This request is consistent with the following "Ahwahnee Principles," developed by the Local Government Commission to promote livable communities:
 - i. Community size should be designed so that housing, jobs, daily needs and other activities are within easy walking distance of each other;
 - ii. As many activities as possible should be located within easy walking distance of transit stops;
 - iii. Streets, pedestrian paths and bike paths should contribute to a system of fully-connected and interesting routes to all destinations. Their design should encourage pedestrian and bicycle use by being small and spatially defined by buildings, trees and lighting; and by discouraging high speed traffic; and
 - iv. The community design should help conserve resources and minimize waste.





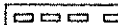

¹ The Location Efficient Mortgage®, (LEM) is a mortgage that helps people become homeowners in location efficient communities. These are convenient neighborhoods in which residents can walk from their homes to stores, schools, recreation, and public transportation. People who live in location efficient communities have less need to drive, which allows them to save money (with greater financial resources available for housing costs) and improves the environment for everyone. The LEM combines a low down payment, competitive interest rates, and flexible criteria for financial qualification to allow more people to own the home of their dreams. For additional information, please refer to www.locationefficiency.com.



NEWHALL RANCH. SPECIFIC PLAN

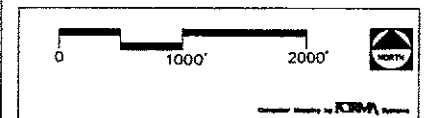
Prepared For: Newhall Ranch Company

LEGEND

-  STATE HIGHWAY
-  MAJOR HIGHWAY
-  SECONDARY HIGHWAY
-  COLLECTOR
-  POSSIBLE FUTURE COLLECTOR ALIGNMENT
-  BUS PULL-IN

Note:

'A' Street is proposed to be downgraded to a Collector Street as shown on Tentative Tract Map 53108 (see Typical Street Section).



**LANDMARK VILLAGE - A STREET
PROPOSED MASTER CIRCULATION PLAN**

JANUARY 2006

CONDITIONAL USE PERMIT
BURDEN OF PROOF
FOR (1) DEVELOPMENT WITHIN
A SIGNIFICANT ECOLOGICAL AREA
AND (2) UTILITIES
VTTM 053108

I. Background

Newhall Land is proposing to develop Landmark Village (formerly River Village), a 291-acre master planned neo-traditional community, located within the "Riverwood" village of the Newhall Ranch Specific Plan. The Specific Plan was approved by the County's Board of Supervisors on May 27, 2003. The Landmark Village project is designed to include a broad spectrum of residential housing, commercial development, institutional services, a community park, and other open space areas, consistent with the approved Specific Plan. The proposed project will implement a portion of the approved Specific Plan through development of 1,444 dwelling units and approximately 1,000,000-square feet of non-residential uses.

Newhall Ranch Program-Level SEA CUP No. 94-087-(5)

The County's Board of Supervisors approved a program-level Significant Ecological Area Conditional Use Permit ("SEA CUP"), SEA CUP No. 94-087-(5), in conjunction with the Board's approval of the Newhall Ranch Specific Plan on May 27, 2003.

CUP No. 94-087-(5) approved: (a) adjustments to the existing boundaries of SEA 23, consistent with General Plan policies requiring the protection of natural resources within SEAs; and (b) Specific Plan development within SEA 23 boundaries. The approved SEA boundary adjustments were found to be consistent with the adopted Specific Plan, which established a Specific Plan designation of "Special Management Area" ("SMA") over the adjusted SEA 23 boundaries. Although the adjusted boundaries within SEA 23 were identified as the "River Corridor SMA" in the adopted Specific Plan, the underlying SEA 23 designation remains in effect.

In approving CUP No. 94-087-(5), the Board specifically found that the proposed development under the approved Specific Plan was consistent with the adopted General Plan for the area (CUP, 43). The Board also found that the Specific Plan adjusted the existing SEA 23 boundaries by removing a limited amount of acreage for development from the existing SEA; however, the existing SEA nevertheless remained in a viable and largely natural condition (CUP, 18-21, 43). In addition, the Board found that the proposed development within SEA 23 conformed to the General Plan SEA "design compatibility criteria" (CUP, 21-36, 43).

Furthermore, the Board found that the Specific Plan is sensitive to, and compatible with, the biotic resources of SEA 23 (CUP, 43). In addition, the Board found that the Specific Plan development will not:

- (a) Adversely affect the health, peace, comfort, or welfare of persons residing or working in the surrounding area; or
- (b) Be materially detrimental to the use, enjoyment, or valuation of property of other persons located in the vicinity of the site; or
- (c) Jeopardize, endanger, or otherwise constitute a menace to the public health, safety, or general welfare (CUP, 43-44).

The Board also found that the Specific Plan site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping, and other development features prescribed in the Zoning Ordinance, or as otherwise required in order to integrate said uses within the uses in the surrounding areas (CUP, 44).

Finally, the Board found that the Specific Plan site is adequately served:

- (a) By highways or streets of sufficient width and improved as necessary to carry the kind and quantity of traffic such use would generate; and
- (b) By other public or private service facilities as are required (CUP, p. 44).

Based on the above findings, the Board approved CUP No. 94-087-(5) subject to various adopted conditions (CUP, 45).

Landmark Village Project-Level SEA CUP

As part of the Landmark Village project approvals, Newhall Land is requesting a project-level SEA CUP for proposed development associated with Landmark Village within SEA 23 in order to ensure consistency with both the adopted Specific Plan and approved program-level CUP No. 94-087-(5).

The proposed Landmark Village project site is approximately 291 acres in size. Of the 291 acres about 14 acres lie within SEA 23 and is designated as Open Area. Except for a portion of the approved Long Canyon Road Bridge alignment, the acreage within the SEA (14 acres) is designated as Open Area. Although some of SEA 23 contains sensitive riparian habitat, none of the proposed development areas is within this habitat.

Overview of the County's Significant Ecological Areas

This section provides information regarding the general background of the County's designated SEAs, and the constraints imposed by the County on development within SEAs, including the Newhall Ranch SEA 23.

The "Significant Ecological Area" designation is one of several land use classifications set forth in the Land Use Element of the Los Angeles County General Plan. SEA classification generally identifies lands having important biological resources. The classification includes habitats of rare and endangered species, sites with critical fish and wildlife values, relatively undisturbed areas of typical natural habitat and regionally scarce biotic resources. The intent of the General Plan is to preserve and enhance SEAs, to the extent possible, for the benefit of present and future County residents.

The purpose underlying SEA land use classification is to preserve SEA resources in an ecologically viable state. Several General Plan policies reflect that intent.

Other factors governing implementation of the General Plan's SEA goals and objectives include the County's ability to accurately identify areas of SEA resource value, the availability of financial and other resources necessary to support preservation, restoration and enhancement efforts, and the competing priorities between resource preservation and other critical public needs. The County's Zoning Ordinance further acknowledges that it is not the purpose of SEA designation to preclude development within SEAs, but rather to ensure, to the extent possible, that such development maintains and, where possible, enhances SEA biotic resources while allowing limited controlled development within SEAs.

SEA General Plan Development Process

Recognizing the resource values at stake and the constraints imposed by competing priorities and objectives, the General Plan seeks to provide a process for reconciling specific conflicts between proposed land uses and the preservation of identified SEAs. The General Plan does not, however, suggest that this can be accomplished by applying a single set of regulatory standards to all SEAs. Instead, the General Plan recognizes that measures necessary to preserve and enhance SEAs will vary depending upon the nature of the resource values present and the degree of threat implied by potential incompatible development. Within this context, the General Plan sets forth SEA compatible land uses and identifies SEA design compatibility criteria to guide specific land use decisions.

As stated above, the General Plan identifies certain uses, which are compatible with SEAs by definition, and certain uses that may be compatible. However, the General Plan notes that it "has not attempted to identify, in other than the most general terms, appropriate use types and intensities within significant ecological areas." Therefore, in order to determine whether a development proposal, in fact, is compatible with a particular SEA, the General Plan requires that the proposal be reviewed for compliance with certain "design compatibility criteria." The design criteria are as follows:

- (a) That the requested development is designed to be highly compatible with the biotic resources present, including the setting aside of appropriate and sufficient undisturbed areas;
- (b) That the requested development is designed to maintain waterbodies, watercourses, and their tributaries in a natural state;
- (c) That the requested development is designed so that wildlife movement corridors (migratory paths) are left in an undisturbed and natural state;
- (d) That the requested development retains sufficient natural vegetative cover and/or open areas to buffer critical resource areas from said requested development;
- (e) That where necessary, fences or walls are provided to buffer important habitat areas from development; and
- (f) That roads and utilities serving the proposed development are located and designed so as not to conflict with critical resources, habitat areas or migratory paths.

Newhall Ranch Specific Plan

The Newhall Ranch Specific Plan requires that a conditional use permit be filed pursuant to Section 22.56.215 (A)(1) of the County Zoning Code for all development proposed within an SMA (SEA).

Zoning Ordinance SEA Development Process

The General Plan requirement that development proposed within an SEA comply with the foregoing "design compatibility criteria" is implemented through provisions of the Los Angeles County Zoning Code. Pursuant to Section 22.56.215(A)(1) of the Code, an applicant must obtain a conditional use permit "prior to the issuance of any building or grading permits, approval of a minor land division or subdivision, or the commencement of any construction or enlargement

of any building or structure on a lot or parcel, which is in or partly in an area designated in the County General Plan and related maps as a significant ecological area."

The General Plan also requires that an application for a SEA conditional use permit undergo an "SEA Performance Review." This process involves review of the application by an appointed Significant Ecological Area Technical Advisory Committee ("SEATAC"). SEATAC reviews the application and accompanying biological resources report for its adequacy, and recommends conditions and guidelines for final project design. Considering the recommendations of SEATAC, the Los Angeles County Regional Planning Commission then takes action upon the proposed development plan.

Pursuant to the General Plan, the Regional Planning Commission recommendation for approval of proposed development within an SEA must be accompanied by a finding that the proposed development is sensitive to, and compatible with, the biotic resources identified in the permit application materials. If the Commission cannot make such a finding, it may deny the project, request a revised development plan, or approve and forward the proposal, together with a statement of overriding considerations, to the Board of Supervisors for further review and action.

Description of SEA 23

The Specific Plan River Corridor SMA (SEA 23) was approved in consideration of the resource values present in the Santa Clara River. The value of the SEA 23 is derived from the riparian habitats and associated species located within its boundaries, and the function of the SEA 23 as a regional wildlife corridor. The SEA 23 also includes habitat for the unarmored threespine stickleback, a state and federally listed endangered species, and other sensitive aquatic and riparian species known to occur within the Specific Plan site. Under the Specific Plan, some development is allowed within the boundaries of SEA 23, including but not limited to trails, wildlife preserves, scenic turnouts, agricultural operations, utilities necessary for public health and welfare, interpretive displays, vista points, and oil and gas operations. Under CUP No. 94-087-(5) three bridge crossings over the river were approved, including the Long Canyon Road Bridge, bank stabilization along portions of the SEA 23, and development on mostly agricultural land within the SEA 23.

II. Proposal

Consistent with the approved Specific Plan and program-level CUP No. 94-087-(5), Newhall Land proposes project-level improvements within SEA 23. The proposed improvements requested are as follows:

- (a) Long Canyon Road Bridge;

- (b) Trails and scenic vista path;
- (d) Bank stabilization;
- (e) Utilities (storm drain outlets, water quality basins, and utilities);
- (f) Agricultural wells;
- (g) Riparian mitigation sites;
- (h) Off-site transport of materials associated with grading; and
- (i) Metrolink right-of-way easement

Long Canyon Road Bridge

In conjunction with the Specific Plan approvals, CUP No. 94-087-(5) approved three elevated highway bridge crossings over the Santa Clara River, including the general alignment for Long Canyon Road Bridge (as well as Commerce Center Drive and San Martinez Grande Road). The number and general location of the bridge crossings were established in order to minimize impacts to sensitive habitat and species within SEA 23, and to minimize major access points to SR-126. Each of the bridge crossings is an extension of an existing road, creating a functional regional circulation system.

As part of the approval of CUP No. 94-087-(5), the County's Board of Supervisors found that the three bridge crossings were essential for a functional circulation system to serve the Specific Plan area and the region, and that the bridges were necessary to advance many of the County's goals and policies related to transportation, land use, and other issues of public interest (CUP, 33-34). The Board also considered and rejected a series of bridge alignment and bridge span alternatives in approving the three crossings via the Specific Plan and related CUP No. 94-087-(5). Each bridge crossing was found to comply with the County's engineering requirements, and to be strategically located and designed to provide maximum transportation effectiveness, while minimizing impacts to critical resources, habitat areas and animal movement paths in riparian corridor areas (CUP, 36-37).

Newhall Land is proposing to construct the Long Canyon Road Bridge component of the approved Specific Plan, as part of the Landmark Village project. Long Canyon Road Bridge will span the width of the Santa Clara River, equating to a roadway segment of approximately 1,100 feet in length and 100 feet in width. The highway bridge crossing is designated as a major

highway until it reaches the south side of the bridge, pursuant to the approved Specific Plan and the County Master Plan of Highways (south of the Santa Clara River, Long Canyon Road is designated as a secondary highway.)

Long Canyon Road Bridge will have 3 lanes of traffic in each direction. It will be designed to meet Department of Public Works standards and include curbs, gutters, sidewalks and a median. Support for the bridge will involve construction of concrete piers to be located within SEA 23. Abutments will be constructed on each side of the river.

Bank stabilization to reduce scour potential of the bridge is proposed along the perimeter of the abutments. The areas of bank stabilization are within SEA 23. Bridge construction will temporarily disturb the riverbed during grading, recompaction and construction. Vegetation along the riverbank and within the river itself will be removed and replaced. After construction, the riverbed will be returned to its natural state with the exception of the concrete supports and bridge abutments. Excavations will be designed to minimize riverbed disturbance, while satisfying the structural requirements of construction. The abutments have been designed to avoid significant riparian impacts.

The introduction of the bridge abutments into the Santa Clara River would have some restriction on flows during a capital flood. The placement of stabilization along the bridge abutments would reduce vegetation and, combined with the restriction of flows by the presence of the abutments, would increase the velocities of water traveling under the bridge. These increases are local in nature and are found immediately at the bridge abutments. Within 200 feet downstream of the bridge, capital storm velocities return to that experienced under the existing conditions of the river.

Newhall Land is authorized to continue the maintenance and operation of existing agricultural river crossings by the California Department of Fish and Game under an *"Agreement for Routine Maintenance Activities."* As part of the Landmark Village development, highway crossings over the Santa Clara River will be restricted to one location (Long Canyon Road Bridge), significantly less than the number of existing agricultural crossings, which are permitted to continue under applicable regulations. In addition, by elevating each bridge crossing, impacts to biotic resources within the SEA 23 are substantially minimized.

Trails

As part of the approved Specific Plan, the County's Board of Supervisors adopted the Newhall Ranch Master Trails Plan, Exhibit 2.4-5, which encompasses a comprehensive system of trails throughout the Specific Plan area, and provides potential connection points to regional trail systems within

the Santa Clarita Valley. The approved Master Trails Plan includes the following hierarchy of trails:

- (a) Regional River Trail;
- (b) Community Trails;
- (c) Local Trails;
- (d) Pathways; and
- (e) Unimproved Trails.

Of the approved trails, the Regional River Trail, located on the north side of the Santa Clara River and extending from the Castaic Creek to the western Specific Plan boundary, represents an important recreational feature of the approved Specific Plan, allowing both active and passive enjoyment of the Santa Clara River through the design of a combined pedestrian/bicycle/equestrian trail.

At the project-level, the Landmark Village development proposes several trails, consistent with the approved Specific Plan. The first includes a portion of the Regional River Trail, which spans and follows the southern boundary of the Landmark Village site. The Regional River Trail includes an improved pedestrian and bicycle route which offers view opportunities along the edge of the river. An equestrian trail will also be provided as a separate dirt trail approximately 3-5 feet from the improved trail. Newhall Land is also proposing a scenic vista path, permitted under the Specific Plan that consists of a 2,500-linear foot loop of nature path below the central portion of the Landmark Village site. The exact location, width, and construction material of the path will be determined after biological surveys have been conducted and the Department of Fish and Game as well as other resource agencies have been consulted.

Utilities

- *Utility Lines*

Landmark Village is an area disconnected from existing developable areas making utility extensions necessary. Utilities planned to serve the Landmark Village project may include, but not be limited to, water, sanitary sewer, gravity sewer, force main, irrigation, cable, gas, fiber optics and reclaimed water lines.

The utility courses will stretch from Los Angeles County Sanitation District No. 32, located directly southwest of the SR-126/I-5 Interchange, to the proposed

Water Reclamation Plant to be located approximately 1.6 miles west of the proposed project. It is unknown at this time the exact route the utilities will take across Landmark Village. However, it is necessary that the utility easements cross SEA 23 at two points beyond the geographic limits of Landmark Village: both east and west of the project directly south of the SR-126 right of way.

Utility lines including potable water, reclaimed water, communications systems ducts, electrical power, natural gas and sanitary sewer lines may also be hung from the Long Canyon Road Bridge, which crosses the SEA, to provide water to areas south of Landmark Village.

- *Water Quality Basins*

Consistent with the program-level CUP No. 94-087-(5), the Landmark Village project proposes installation of water quality basins and vegetated treatment swales located within the project and along the southern portion of the site. These basins and swales will be designed to capture first flush storm water (i.e., the first 0.75 inches of runoff) and non-storm water urban runoff from the developed areas within the Landmark Village project. These water quality basins and swales will be designed to the specifications of the County's Department of Public Works and the state Regional Water Quality Control Board. After treatment, water run-off will be conveyed through a closed or open channel to the river. This conveyance system will be within SEA 23. Water quality basins and swales will either be maintained by the Department of Public Works or a Landscape Maintenance District.

Clean sediment, periodically removed from debris basins located at the interface of undeveloped land areas where drainages have not entered the developed portions of the site, may be placed into the river area as approved by the various regulatory agencies. Necessary permits from the U.S. Army Corps of Engineers, State Department of Fish and Game, and the Regional Water Quality Control Board to allow for such placement of sediment, prior to construction of any development that contemplates debris basins or bank stabilization.

- *Storm Drain Outlets*

There are five proposed storm drain outlets to be installed within SEA 23. Each storm drain easement is approximately 25 feet in width and lies along the southern VTTM boundary. The easements barely jut out southerly from the VTTM into SEA 23 buffer zone. The easements do not extend beyond the width of the swath proposed for bank stabilization.

Bank Stabilization

The approved Specific Plan contemplated installation of bank stabilization along the Santa Clara River. The environmental effects of the bank stabilization were thoroughly assessed at the program level in the Newhall Ranch Final Additional Analysis, which was certified by the County's Board of Supervisors on May 27, 2003. At the project-level, the Landmark Village development includes limited bank stabilization to protect the project from erosion during capital storm events.

The design of the bank stabilization will be required to conform to the standards of the Department of Public Works. A total of approximately 10,620 lineal feet of bank stabilization will be required as part of the proposed project. The stabilization material will consist primarily of buried soil cement to minimize visual intrusion and to resist scouring. In limited instances, grouted rip-rap or concrete gunite will be installed at bridge abutments and other transition areas.

The bank stabilization along portions of the southern boundary of the project site will be designed and constructed to retain the river's significant riparian vegetation and habitat, to allow the river to continue to function as a regional wildlife corridor, and to provide flood protection pursuant to Los Angeles County standards.

Agricultural Wells

There are eleven existing agricultural wells. As a part of Landmark Village development, six (6) are proposed to remain although some may be relocated. Each water well will be 10,000 square-feet in land area.

Potential Riparian Mitigation Sites

Mitigation for impacts as a result of the Landmark Village development on riparian resources will include restoration of riparian habitat and may include enhancement activities. The general areas in which riparian mitigation activities may take place are shown on attached Newhall Ranch Specific Plan Exhibit 2-6.3, Candidate Riparian Restoration/Enhancement Areas.

Under the Specific Plan "Wildlife, nature, forest and marine preserves" use type is a permitted land use designation within SEA 23. Habitat restoration and enhancement associated with the Landmark Village development may consist of revegetation and/or rehabilitation of native plant communities on sites that have had the habitat removed due to past activities such as agricultural or oil and natural gas operations. Unavoidable impacts to riparian resources shall be minimized through project design, and then mitigated by the implementation of a revegetation and/or rehabilitation plan.

The restoration mitigation areas located within SEA 23 shall be in areas that have been disturbed by previous uses or cases. Mitigation shall be conducted only on sites where soils, hydrology, and microclimate conditions are suitable for riparian habitat. The candidate areas are comprised almost entirely of disturbed areas; therefore, after restoration, the sites can be considered "new" sensitive habitat within SEA 23. The goal is to increase habitat patch size and connectivity with other existing habitat patches while restoring habitat values that will benefit sensitive species.

Restoration of riparian habitats within SEA 23 shall use plant species native to the Santa Clara River. Cuttings or seeds of native plants shall be gathered within SEA 23 or purchased from nurseries with local supplies to provide good genetic stock for the replacement habitats.

Per the Specific Plan, four sites associated with the Landmark Village development have been determined to be conceivable "Candidate Riparian Restoration areas". One is located adjacent to the northeast corner of the project, just south of SR-126 and is approximately two acres in size. The second area and the largest of the four sites, approximately 16 acres and is located south of the western portion of the project. A potential 2.4-acre site lies south of the eastern portion of the project. These sites generally hug the boundary of the VTTM resulting in no obstruction to the riverbed. A last site lies just west of the project and continues to run west, south of SR-126.

Off-site Transport of Materials in Conjunction with Permitted Grading

There are two transport routes that are proposed to cross SEA 23, both of which coincide with operational agricultural river crossings permitted by the California Department of Fish and Game. Off-site transport of materials shall comply with all applicable requirements of other County departments and other governmental agencies.

Metrolink Right-of-Way Easement

In order to provide future residents in the Santa Clarita Valley (including Newhall Ranch) with alternative modes transportation, a Metrolink rail system line is proposed. The right-of-way easement for the line will vary from 35 feet to 50 feet in width and will run parallel to SR-126 extending east and west from the project. The easement will cross SEA 23 at two points beyond the geographic limits of Landmark Village: both east and west of the project directly south of the SR-126 right of way.

CONDITIONAL USE PERMIT
BURDEN OF PROOF

As part of the program CUP No. 94-087-(5), which was approved on May 27, 2003, the County's Board of Supervisors already determined that development within the Specific Plan SEA 23 met the County's requirements for issuance of a conditional use permit within a significant ecological area. Accordingly, the purpose for this section of the application is to show that the Landmark Village development is consistent with the approved Newhall Ranch Specific Plan, including the previously approved program CUP No. 94-087-(5). These uses specifically include trails, riparian restoration areas, storm drain outlets, water quality basins, utilities, proposed agricultural wells, Long Canyon Road Bridge, bank stabilization, the off-site transport of grading material, and the Metrolink easement. In addition, the applicant is concurrently requesting under this application, that the County permit publicly-owned and maintained uses necessary for the maintenance of the public health, convenience or general welfare ("public improvements") within the SEA 23 land designation. Substantiation is demonstrated by the following facts:

A. *That the requested use at the location will not:*

1. *Adversely affect the health, peace, comfort or welfare of persons residing or working in the surrounding area, or*

The County's Board of Supervisors already determined that the approved Specific Plan, including CUP No. 94-087-(5), will not "adversely affect the health, peace, comfort or welfare of persons residing or working in the surrounding area." Therefore, at the project-level, the pertinent question is whether the Landmark Village development is consistent with the approved Specific Plan and CUP No. 94-087-(5). If consistent, and absent any significant change in the Specific Plan or its circumstances, the Landmark Village development should necessarily satisfy the above SEA CUP requirement.

As part of the Landmark Village development, the Long Canyon Road Bridge component of the approved Specific Plan will be constructed. By allowing construction of the Long Canyon Road Bridge, a component of the Specific Plan's traffic circulation system will be implemented. This component will provide another traveling route for automobile traffic, which minimizes congestion and reduces traffic trip time for residents and visitors of the Newhall Ranch community. Under the Specific Plan, the Long Canyon Road Bridge was contemplated to be the primary elevated bridge crossing for the central portions of the Newhall Ranch community. It will provide the

necessary connection to SR-126 and direct access to the business park uses north of SR-126. As a result, the bridge will provide an important link between future residential areas south of the river and employment opportunities to the north. In addition, the bridge will provide an alternate route for residents and others to reach destinations both within and outside of the Specific Plan.

The Newhall Ranch land uses have been designed using a village concept, with higher intensity uses clustered into village centers. This land use arrangement promotes the reduction of vehicle miles traveled by permitting more people to live near shopping, services and recreation. Bridge crossings significantly reduce the travel distances between these village centers and the other commercial uses north of the river. As a result, the bridges improve traffic flow and efficiency and reduce automobile vehicle miles traveled. The Landmark Village development and the proposal to construct the Long Canyon Road Bridge are consistent with the above Specific Plan design objectives.

Specifically, Landmark Village will be designed utilizing compact development, which will minimize impacts on the environment when compared to lower density, scattered development. A significant environmental benefit associated with traditional neighborhood design is that it consumes less land than conventional suburban development, but it accommodates roughly the same amount of development. By focusing the proposed development within Landmark Village in less sensitive areas, the proposed development will avoid or minimize impacts on sensitive habitat associated with the river than may occur under a low density development alternative. It also prevents the fragmentation of wildlife habitat, reduces stormwater runoff, and conserves open space areas.

The Landmark Village development will also implement a portion of the Regional River Trail, along with other local trails contemplated by the approved Specific Plan. The location of the Regional River Trail and the other local trails is consistent with the Specific Plan, minimizes impacts to SEA 23, avoids conflicts with vehicles and is consistent with existing trail alignments in the Santa Clarita Valley.

The Specific Plan approved bank stabilization within SEA 23. The Landmark Village development would implement a portion of the approved bank stabilization along the southern boundary of the project site. The bank stabilization would be constructed, consistent with the requirements of the approved Specific Plan. The portion of the bank stabilization that will be part of the Long Canyon Road Bridge abutment represents a health and safety benefit to the public as it provides a base for the elevated bridge, which is designed to accommodate Long Canyon Road, a major highway designated

on the Mobility Plan of the approved Specific Plan and on the County's Master Plan of Highways.

The Landmark Village development will include installation of water quality basins, storm drain outlets and utility crossings (collectively, public improvements). These proposed improvements will be designed to minimize impacts to sensitive habitat and resources associated with the river. The improvements will also be designed to promote the health, safety and welfare of persons residing or working in the Landmark Village development.

The proposed restoration mitigation areas located within SEA 23 shall be in areas that have been disturbed by previous uses or activities. Candidate areas are comprised almost entirely of disturbed area; therefore, after restoration, the sites can be considered "new" sensitive habitat with SEA 23. The goal is to increase habitat patch size and connectivity with other existing habitat patches while restoring habitat values that will benefit sensitive species.

2. *Be materially detrimental to the use, enjoyment or valuation of property of other persons located in the vicinity of the site, or*

The County's Board of Supervisors already determined that the approved Specific Plan, including CUP No. 94-087-(5), will not "be materially detrimental to the use, enjoyment or valuation of property of other persons located in the vicinity of the site." The Landmark Village development implements a portion of the approved Specific Plan. The project-level development proposed within SEA 23 as part of the Landmark Village development is considered consistent with the approved Specific Plan. Accordingly, the Landmark Village development is not anticipated to be "detrimental" to the use, enjoyment or valuation of property or persons located in the vicinity of the project site. In fact, the proposed Landmark Village development would promote healthy living by offering an environment and infrastructure that would entice people outdoors. The interconnectivity of walking, hiking, equestrian and biking trails will allow residents to enjoy Newhall Ranch's topographic variety, mountain ranges, open vistas, and valleys.

- 3 *Jeopardize, endanger, or otherwise constitute a menace to the public health, safety or general welfare; and*

The County's Board of Supervisors already determined that the approved Specific Plan, including CUP No. 94-087-(5), will not "jeopardize, endanger, or otherwise constitute a menace to the public health, safety or general welfare." The Landmark Village development will provide improvements within SEA 23, consistent with the approved Specific Plan. The proposed project site is adequate to accommodate the improvements requested within

SEA 23, as discussed above. The proposed improvements are adequate in size and shape to accommodate all development features and standards required by the County.

- B. *That the proposed site is adequate in size and shape to accommodate the yards, walls, fences, parking, and loading facilities, landscaping and other development features prescribed in this Title 22, or as is otherwise required in order to integrate said use with the uses in the surrounding area;*

The County's Board of Supervisors already determined that the approved Specific Plan, including CUP No. 94-087-(5), satisfied the above requirements. The Landmark Village development will provide improvements within SEA 23, consistent with the approved Specific Plan. The proposed site is adequate for the improvements requested within SEA as discussed above. The applicant is not seeking any variances or exceptions to the County's development standards that may affect SEA 23.

- C. *That the proposed site is adequately served:*

1. *By the highways or streets of sufficient width, and improved as necessary to carry the kind and quantity of traffic such use would generate, and*

The County's Board of Supervisors already determined that the approved Specific Plan, including CUP No. 94-087-(5), is adequately served by highways and streets of sufficient width, and improved as necessary to carry the kind and quantity of traffic contemplated by the approved Specific Plan land uses. Consistent with the Specific Plan, the Landmark Village development will include a project-level circulation plan depicting the streets and highways required to accommodate the traffic generated by the proposed project. This project-level circulation plan is an integral part of the overall Landmark Village development, and has been designed to implement a number of the Specific Plan's circulation objectives. These objectives include improving the internal and external trips by future residents; providing opportunities for using alternative modes of transportation; and providing an aesthetically pleasing environment, while achieving the above mobility/circulation objectives.

Residents, bicyclists, hikers, equestrians, visitors and others will have close view of SEA 23. However, as noted above, mitigation measures and conditions of approval are in place to prevent harmful intrusion within SEA 23, thereby protecting its unique habitat value. No public or private service facilities are required or associated with development that will occur within the SEA 23.

2. By other public or private service facilities as are required.

The County's Board of Supervisors already determined that the Specific Plan site is adequately served by other public improvements and private service facilities, and that the Specific Plan itself will provide additional public and private service facilities as part of the Newhall Ranch community. Accordingly, the Board approved both the Specific Plan and CUP No. 94-087-(5). At the project level, as part of the Landmark Village development, the applicant will verify that capacity is available for all appropriate public and/or private service facilities to meet the needs of the proposed project. If deficiencies are identified, it is expected that, as part of the project, the applicant would be required to mitigate such impacts. Therefore, it is expected that, with appropriate conditions of approval, the proposed site will be adequately served by all required public and/or private service facilities.

ADDITIONAL BURDEN OF PROOF
FOR SEA FINDINGS
SECTION 22.56.215 F.2

The County's Board of Supervisors already determined that the approved Specific Plan, including CUP No. 94-087-(5), conformed with the General Plan's SEA six "design compatibility criteria." Presented below are the six design compatibility criteria, along with a summary substantiating both the Specific Plan's conformity with such criteria, as well as Landmark Village's conformity at the project level.

- 1. That the requested development is designed to be highly compatible with the biotic resources present, including the setting aside of appropriate and sufficient undisturbed areas.**

Specific Plan Summary

The County's Board of Supervisors already found that the Specific Plan and CUP No. 94-087-(5) met Design Compatibility Criterion No. 1, above. In summary, the Board found that the Specific Plan is considered highly compatible with the biotic resources present within the boundaries of the SEA 23 for the following reasons:

- (a) The Specific Plan set aside appropriate and sufficient undisturbed sensitive habitat areas within the existing boundaries of SEA 23;
- (b) The Specific Plan retained SEA 23 in a largely natural state;
- (c) Only a relatively small amount of sensitive habitat (*i.e.*, one acre, or 0.08 percent of the existing SEA) was redesignated for non-residential land uses;
- (d) The impacted areas would be fully mitigated;
- (e) The river would still be sufficiently wide (and in certain locations widened) to accommodate the County's Capital Flood and still retain the sensitive riparian vegetation;
- (f) Winter storm runoff would still continue to open its own channels through the river vegetation, flowing in a natural, non-invasive manner and preserve the meandering characteristics of the streambed;
- (g) The tributary canyons and bluffs on the south side of the river would still be preserved and provide an additional 444 acres (including 415 acres of undisturbed land), which would be dedicated to Open space areas adjacent to the river; and

- (h) Due to implementation of the Specific Plan, the amount of sensitive riparian habitat found in the existing SEA 23 would increase by approximately five acres and an additional 192 acres of additional sensitive habitat areas adjacent to the SEA 23 would be permanently preserved.

The Newhall Ranch Final Additional Analysis, Section 2.3, also addressed potential impacts due to channelization and bank hardening. Based on that analysis, the Board of Supervisors found that no significant increases in velocity, erosion or sedimentation would occur in the river; and, therefore, biotic resources present within the existing boundaries of SEA 23 would not be significantly impacted.

Landmark Village Summary

At the project level, the Landmark Village development within SEA 23 is designed to be highly compatible with biotic resources present within that corridor, including setting aside an appropriate and sufficient amount of undisturbed area, consistent with the approved Specific Plan. The project-level development proposed within SEA 23 includes the planned and approved Long Canyon Road Bridge abutments and piers. In addition, the project proposes to implement a portion of the approved Regional River Trail and other planned local trails. The proposed project will also include water quality basins and associated conveyance lines, utility crossings, storm drain outlets, and riparian mitigation sites. These proposed improvements were contemplated by the approved Specific Plan. The vast majority of SEA 23 will be left in a natural state, consistent with the Specific Plan.

- 2. That the requested development is designed to maintain water bodies, watercourses, and their tributaries in a natural state.**

Specific Plan Summary

The County's Board of Supervisors already found that the Specific Plan and CUP No. 94-087-(5) met Design Compatibility Criterion No. 2, above. In summary, the Board found that the Specific Plan has been designed to maintain waterbodies, watercourses, and their tributaries in a natural state. As indicated above, the Board also found that no significant increases in velocity, erosion, or sedimentation would occur in the river because of the Specific Plan. During most storm events, the velocity and depth of the river would remain unchanged from current conditions, since the course of the river is able to meander without being constrained by bridge abutments or bank protection. It is only in the infrequent, 50- to 100-year event where small increases in depth or velocity will occur at certain locations along the river. In making these findings, the Board

relied on the Newhall Ranch Final Additional Analysis, Section 2.3, which provided a detailed analysis of the Specific Plan impacts to the floodplain areas within the site, including the depth and velocity of water flow in the Santa Clara River. Based on that analysis, the Board found that the Specific Plan's projected river flow increases did not significantly affect the water flow in the river.

Landmark Village Summary

As contemplated by the approved Specific Plan, Long Canyon Road Bridge will require the placement of abutments and piers in the river area; however, the effect of each bridge crossing, including Long Canyon Road Bridge, was thoroughly assessed in the Newhall Ranch Final Additional Analysis, Section 2.3, Floodplain Modifications. At the project level, the environmental analysis will further address the bridge abutments and piers to further assess impacts, if any, to the river corridor.

As contemplated by the approved Specific Plan, the Landmark Village development will include bank stabilization, but only where necessary to protect development from erosion. Bank stabilization is proposed to be ungrouted rock in all areas except at outlet structures, access ramps, and bridge abutments where it is expected that grouted rock or reinforced concrete will be required to meet Los Angeles County Department of Public Works standards. Alternative materials to rip rap for bank stabilization, including buried soil cement, will be considered by the Department of Public Works Flood Control section. Bank stabilization specifications will be further developed as part of the environmental review process for the Landmark Village development.

- 3. That the requested development is designed so that wildlife movement corridors (migratory paths) are left in an undisturbed and natural state.**

Specific Plan Summary

The County's Board of Supervisors already found that the Specific Plan and CUP No. 94-087-(5) met Design Compatibility Criterion No. 3, above. In summary, the Board found that under the Specific Plan, SEA 23 would continue to function as a wildlife movement corridor because the Specific Plan design retained both the riparian vegetation in the river and the natural flow of the water without the need for periodic vegetation clearing. The Board also found that the Specific Plan showed a substantially reduced level of impact to sensitive riparian habitat along the Santa Clara River (the originally proposed 103 acres of impact was reduced to approximately one acre). The Board further found that the Specific Plan resulted in an increase of five acres in the amount of sensitive riparian

habitat along the river, and that the Specific Plan established transition areas to separate SEA 23 from the urban uses identified in the Land Use Plan. In addition, the Board found that the three bridges over the river would be sufficiently high as to allow the continued use of the river by animals for movement east to west along and within the river route, and that lighting controls would ensure that SEA 23 would continue to function as a wildlife movement corridor. The Board also found that Section 2.5 (Public Services and Facilities Plan) and Section 2.6 (Resources Management Plan) of the Specific Plan provide objectives and conceptual plans for preserving the river and Salt Canyon in a natural and undisturbed state. Finally, the Board found that the Newhall Ranch Final EIR and Additional Analysis addressed impacts and imposed mitigation measures for the identified impacts that would occur. As a condition of approval, the Board also required the applicant to conserve in perpetuity approximately 1,517 acres of the Salt Creek watershed in Ventura County, adjacent to the Specific Plan site, which enhances the Specific Plan's compatibility with animal movement in the region.

Moreover, the Board found that the tributaries (Castaic, San Martinez, and Chiquito Canyon Creeks) to the Santa Clara River within SEA 23 would all be maintained and preserved in a largely natural state with soft bottoms pursuant to Section 2.5 (Public Services and Facilities Plan) and Section 2.6 (Resources Management Plan) of the Specific Plan. Furthermore, the Board found that the remainder of these tributaries outside SEA 23 but within the Specific Plan were designated open space areas and preserved in a largely natural state.

The Board also found that the Salt Canyon area of the Specific Plan served as a wildlife movement corridor, and that the limited development proposed within SEA 23 would not have any impact upon this wildlife movement area. As indicated above, the Board required the applicant to dedicate 1,517 acres of the Salt Creek watershed in Ventura County, adjacent to the Specific Plan site, in perpetuity, thereby enhancing the Specific Plan's compatibility with animal movement in the region.

In addition, the Board noted that Caltrans had completed the widening of SR-126 from Fillmore in Ventura County to the I-5 freeway in Los Angeles County. As part of that widening project, major north/south animal movement undercrossings were installed under SR-126 at three locations. In addition, three additional larger undercrossings exist along SR-126 within the Specific Plan area at locations where bridges and culverts were constructed over secondary tributary stream courses. Because the undercrossings were designed to facilitate north/south wildlife movement, and because the three undercrossings within the Specific Plan site are of sufficient size to accommodate north/south wildlife movement, the Board found that north/south connectivity across the Santa Clara River will not

be significantly impacted. The Board's findings were supported by the Newhall Ranch Final Additional Analysis, Section 2.2, Salt Creek Corridor.

Landmark Village Summary

Consistent with the approved Specific Plan, for the most part, animal migratory paths within the SEA 23 will be left in an undisturbed, natural state. Again, the exception will be at the Long Canyon Road Bridge abutment and pier locations. All construction-related impacts of proposed development within the SEA 23 will be further assessed as part of the environmental review process for the Landmark Village development with mitigation measures imposed as appropriate.

Other proposed development within SEA 23 – (trails, storm drain outlets, water quality basins, utility lines, agricultural wells, Long Canyon Road Bridge, bank stabilization, and off-site transport of grading materials) – will have a de minimus impact on migratory pathways, and the riparian mitigation areas will actually prove to provide beneficial cover for migratory animals.

- 4. That the requested development retains sufficient natural vegetative cover and/or open spaces to buffer critical resource areas from said requested development.**

Specific Plan Summary

The County's Board of Supervisors already found that the Specific Plan and CUP No. 94-087-(5) met Design Compatibility Criterion No. 4, above. In summary, the Board found that the Specific Plan retained sufficient natural vegetative cover and open space areas to buffer critical resources found in SEA 23 from the proposed development shown in the Specific Plan. Furthermore, the Board found that implementation of the Specific Plan would result in the direct preservation of 1,390 acres of land along the Santa Clara River Corridor within the boundaries of the Specific Plan area. In addition, the Board found that the Specific Plan incorporated an extensive buffer area to protect critical resources within SEA 23.

Landmark Village Summary

Consistent with the approved Specific Plan, the requested development within Landmark Village will retain sufficient natural vegetative cover and/or open space areas to complement SEA 23. As part of the Landmark Village development, a setback or buffer zone will be established along the southern boundary of the project site to protect sensitive habitat along the SEA 23. Furthermore, the vegetation within

portions of the setback or buffer zone will be restored and/or enhanced to increase habitat values when compared to existing conditions.

- 5. That where necessary, fences or walls are provided to buffer important habitat areas from development.**

Specific Plan Summary

The County's Board of Supervisors already found that the Specific Plan and CUP No. 94-087-(5) met Design Compatibility Criterion No. 5, above. In summary, the Board found that the discussion of Design Compatibility Criterion No. 4, above, described how the Specific Plan incorporated vegetative cover and open space areas to buffer critical resources from the proposed uses in the Specific Plan. In addition to these features, the Board found that the Specific Plan also buffered habitat from proposed uses through development regulations and design guidelines. As indicated in Chapter 4 of the Specific Plan, future residential subdivisions and commercial development constructed within the Specific Plan area must include fences or walls that will preclude access to sensitive resources within SEA 23. As each tract or parcel map is submitted to the County, it must be reviewed to determine whether proposed uses substantially comply with the standards, regulations, and guidelines of the Specific Plan, including those pertaining to fencing and walls to ensure that they buffer important SEA 23 habitat areas from development.

Landmark Village Summary

Consistent with the approved Specific Plan, the Landmark Village development proposes fences and walls to protect significant habitat within the SEA 23. In addition, other mitigation measures and conditions of approval will be adopted to ensure the protection of sensitive biotic resources within the SEA 23 (e.g., shielding of illumination). The locations of the designated fences and walls and their relation to the SEA 23 will be further assessed during the environmental review process for the Landmark Village development.

- 6. That roads and utilities serving the proposed development are located and designed so as not to conflict with critical resources, habitat areas or migratory paths.**

Specific Plan Summary

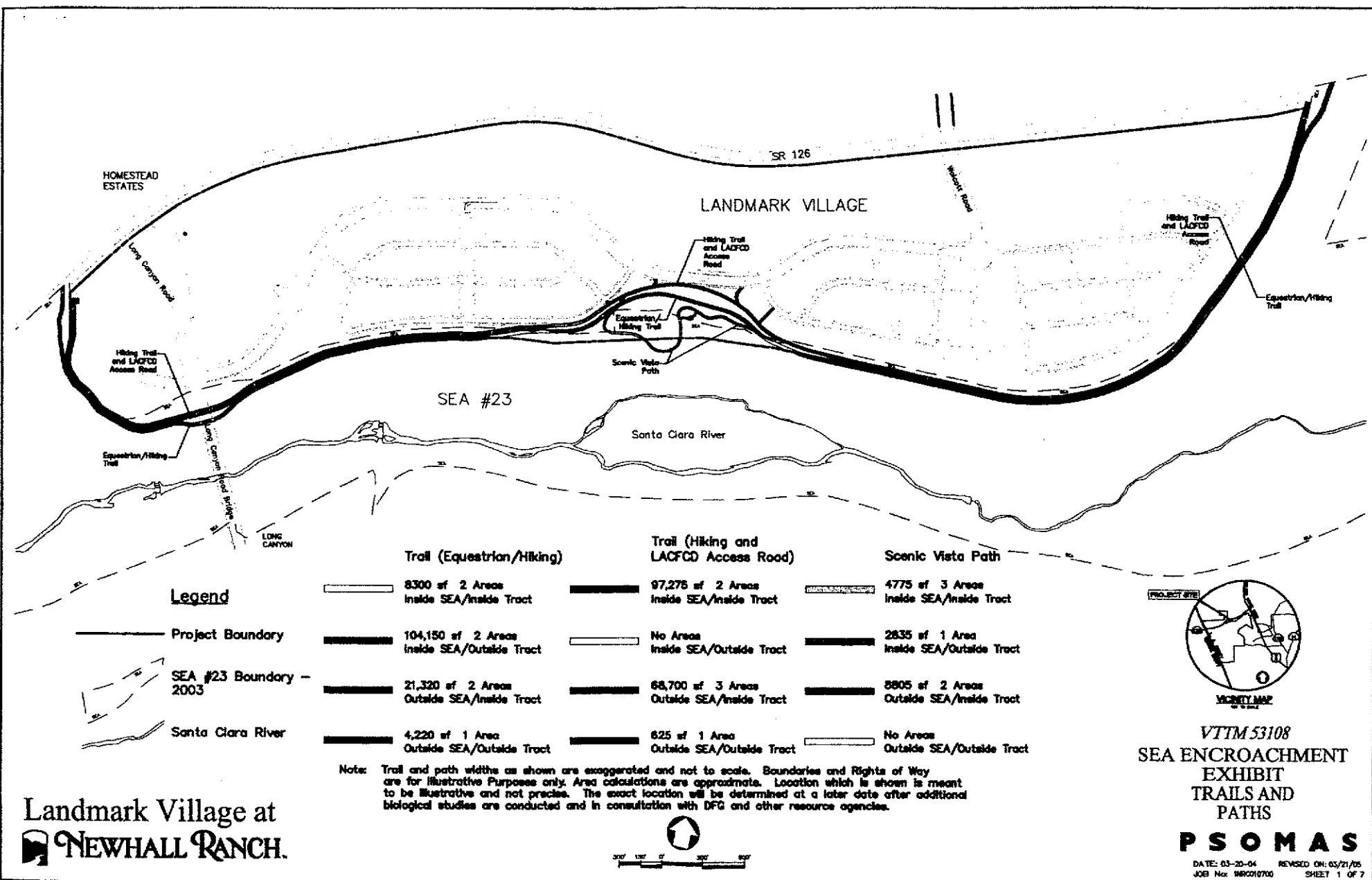
The County's Board of Supervisors already found that the Specific Plan and CUP No. 94-087-(5) met Design Compatibility Criterion No. 6, above. In summary, the Board found that the Specific Plan proposed the construction of three bridges and several utility lines across the Santa

Clara River, within the existing SEA 23. Utilities serving the proposed Specific Plan, where feasible, would be incorporated with the river bridges.

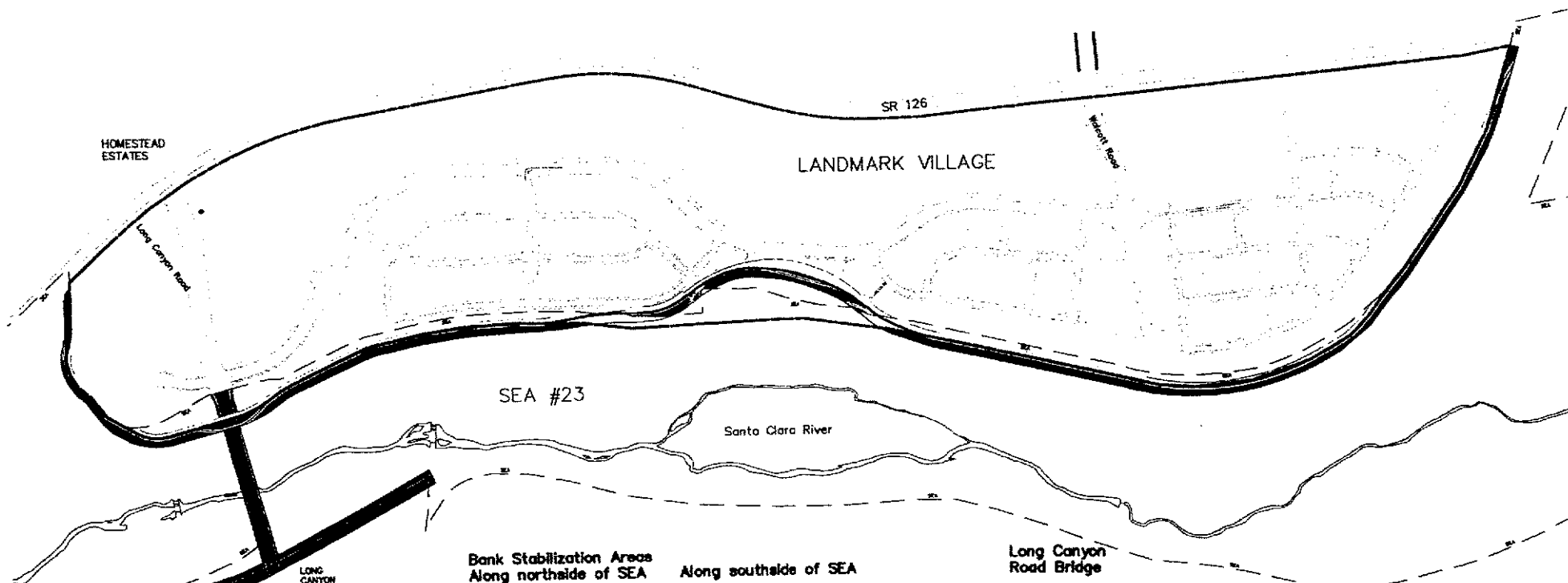
The Board also found that the bridge crossings would have support columns in the riverbed, but the crossings are elevated structures so as to reduce impacts on river vegetation and sensitive species and to allow species that move along the river course to continue to use existing resources. Moreover, the Board found that the elevated bridge crossings would ultimately replace the existing at-grade agriculture crossings, which would minimize the amount of direct disturbance to the riverbed and its environs. Based on the assessment provided in the Newhall Ranch Final Additional Analysis, Section 2.4, SEA General Plan Consistency, the Board concluded that the roads and utilities serving the Specific Plan were located and designed so as not to conflict with critical resources, habitat areas or migratory paths.

Landmark Village Summary

Consistent with the approved Specific Plan, at the project level, the Landmark Village development will design and locate project roads and utilities so as not to conflict with critical resources, habitat areas or migratory paths. The vast majority of roadways and utilities serving Landmark Village are removed far to the north of SEA 23 and has no impacts on it. The number and location of the bridge crossings were established by the Specific Plan in part to minimize impacts on SEA 23 and other sensitive resources. As part of the Landmark Village development, the Long Canyon Road Bridge crossing will be implemented. All other roads within the Landmark Village development are designed to parallel SEA and loop back to the planned Long Canyon Road Bridge crossing, or to SR-126. All roads used by daily vehicular traffic are outside SEA 23. Only minor encroachment from trails and public improvements encroach within the SEA. The roads and utilities serving the Landmark Village development will be further assessed as part of the environmental review process for the proposed project.



Landmark Village at
NEWHALL RANCH.



Legend

- Project Boundary
- SEA #23 Boundary - 2003
- ~ Santa Clara River

Bank Stabilization Areas Along northside of SEA

- 41,400 sf 3 Areas
Inside SEA/Inside Tract
- 475,675 sf 2 Areas
Inside SEA/Outside Tract
- 96,400 sf 3 Areas
Outside SEA/Inside Tract
- No Areas
Outside SEA/Outside Tract

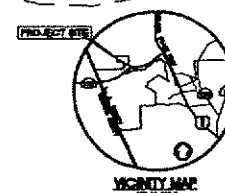
Along southside of SEA

- No Areas
Inside SEA/Inside Tract
- 308,675 sf 2 Areas
Inside SEA/Outside Tract
- No Areas
Outside SEA/Inside Tract
- 283,600 sf 4 Areas
Outside SEA/Outside Tract

Long Canyon Road Bridge

- 22,000 sf 1 Area
Inside SEA/Inside Tract
- 83,725 sf 1 Area
Inside SEA/Outside Tract
- No Areas
Outside SEA/Inside Tract
- 15,125 sf 1 Area
Outside SEA/Outside Tract

Note: Boundaries and Rights of Way are for illustrative purposes only.
Area calculations are approximate and include areas outside of the limits of this drawing.
Location which is shown is meant to be illustrative and not precise.

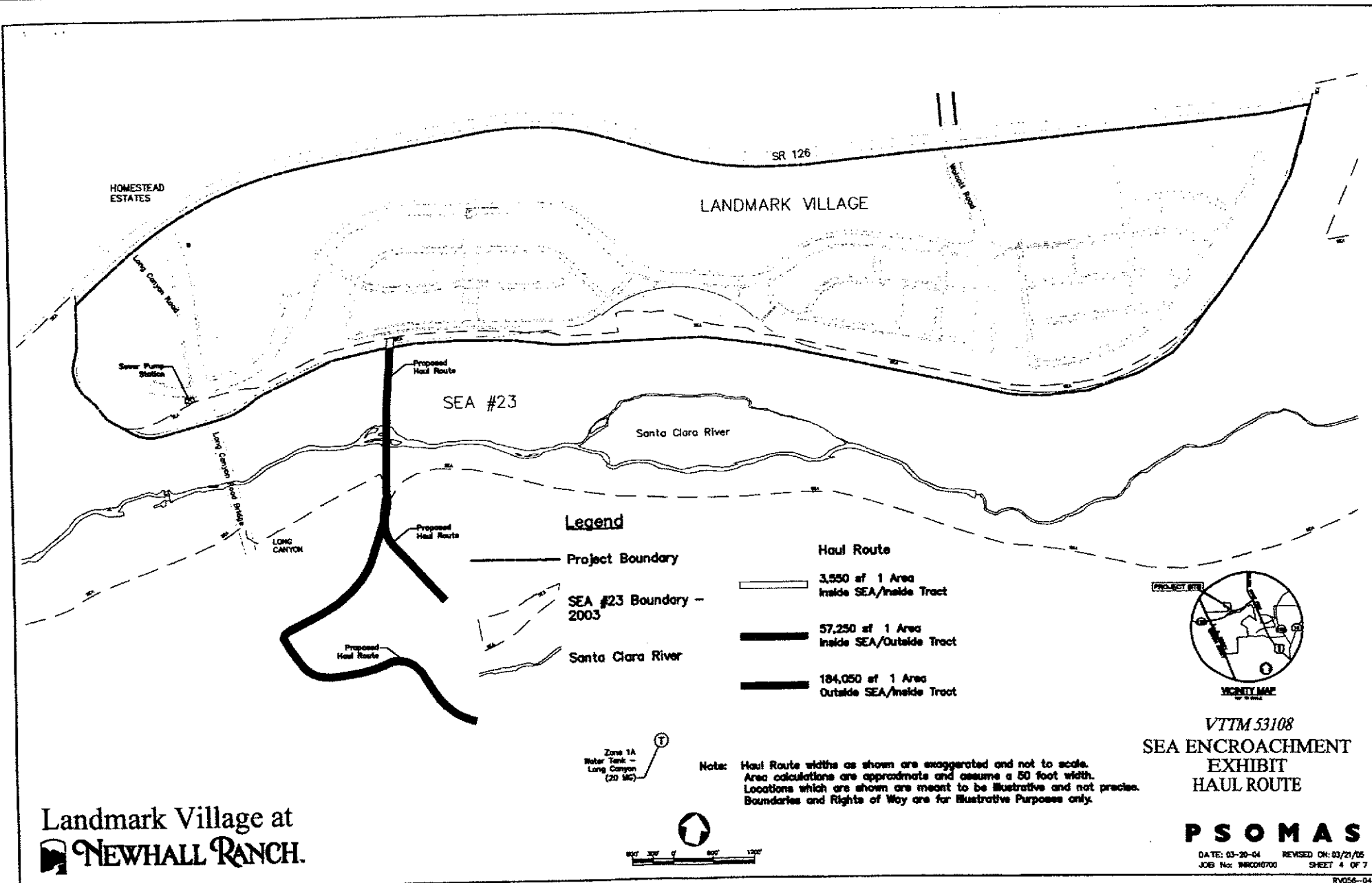


VTM 53108
SEA ENCROACHMENT
EXHIBIT
BANK STABILIZATION AND
LONG CANYON ROAD BRIDGE

PSOMAS

DATE: 03-20-04 REVISED ON: 03/21/05
JOB No: BRC010700 SHEET 3 OF 7

Landmark Village at
NEWHALL RANCH.



Landmark Village at
NEWHALL RANCH.

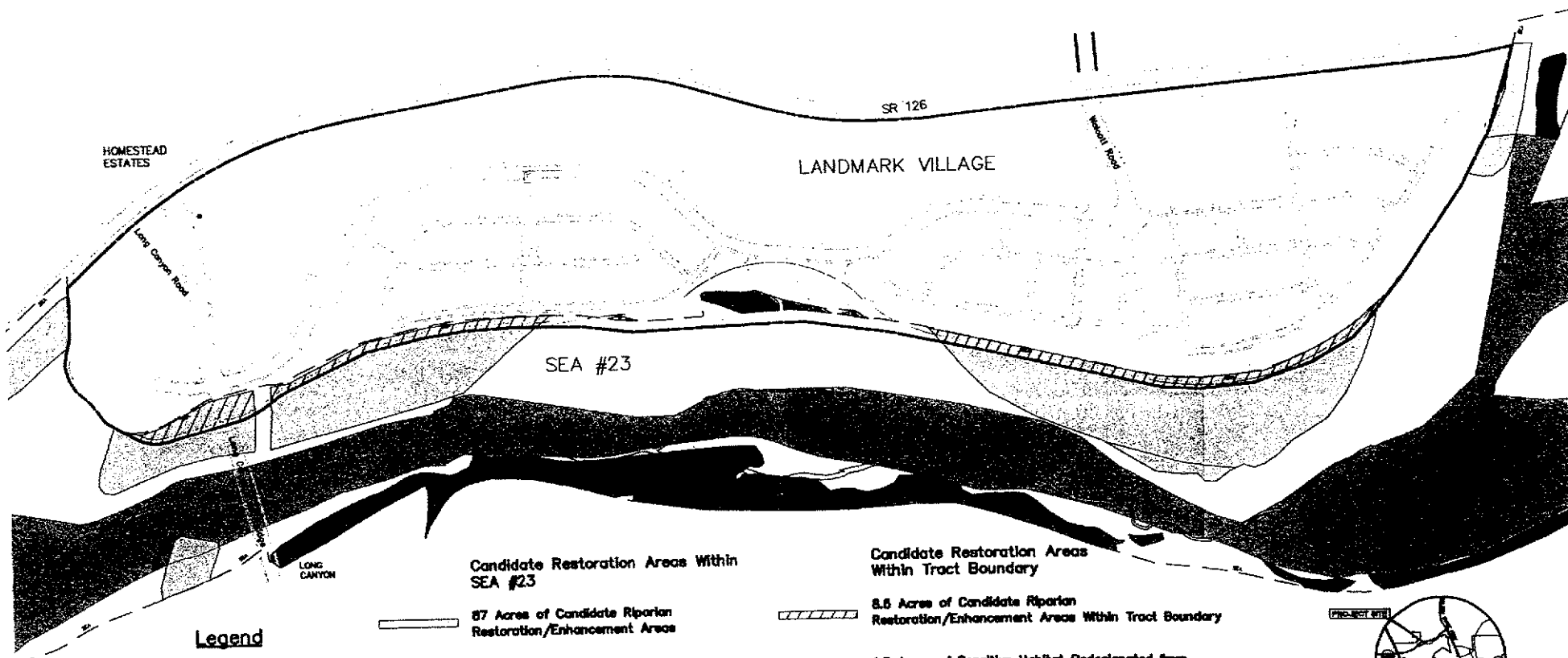
VTM 53108
 SEA ENCROACHMENT
 EXHIBIT
 HAUL ROUTE

PSOMAS

DATE: 03-20-04 REVISED ON: 03/21/05
 JOB No: 040010700 SHEET 4 OF 7

RV056-04

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Legend

- Project Boundary
- SEA #23 Boundary - 2003
- ~ Santa Clara River

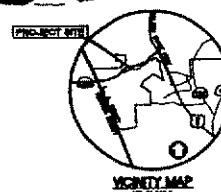
Candidate Restoration Areas Within SEA #23

- 87 Acres of Candidate Riparian Restoration/Enhancement Areas
- 106 Acres of Sensitive Habitat Redesignated from Residential and Non-Residential Land Uses to Proposed SEA #23
- 14 Acres of Sensitive Habitat Added to Proposed SEA #23
- Water Course

Candidate Restoration Areas Within Tract Boundary

- 8.6 Acres of Candidate Riparian Restoration/Enhancement Areas Within Tract Boundary
- 1.5 Acres of Sensitive Habitat Redesignated from Residential and Non-Residential Land Uses to Proposed SEA #23 Within Tract Boundary
- No Areas of Sensitive Habitat Added to Proposed SEA #23 Within Tract Boundary

Note: Not all of Candidate Restoration Areas outside of the Tract Boundary are shown. Boundaries and Rights of Way are for illustrative purposes only. Area calculations are approximate and include Candidate Restoration Areas outside of the limits of this drawing. Locations of Candidate Restoration Areas are meant to be illustrative and precise location may shift based on more detailed, future biological surveys.

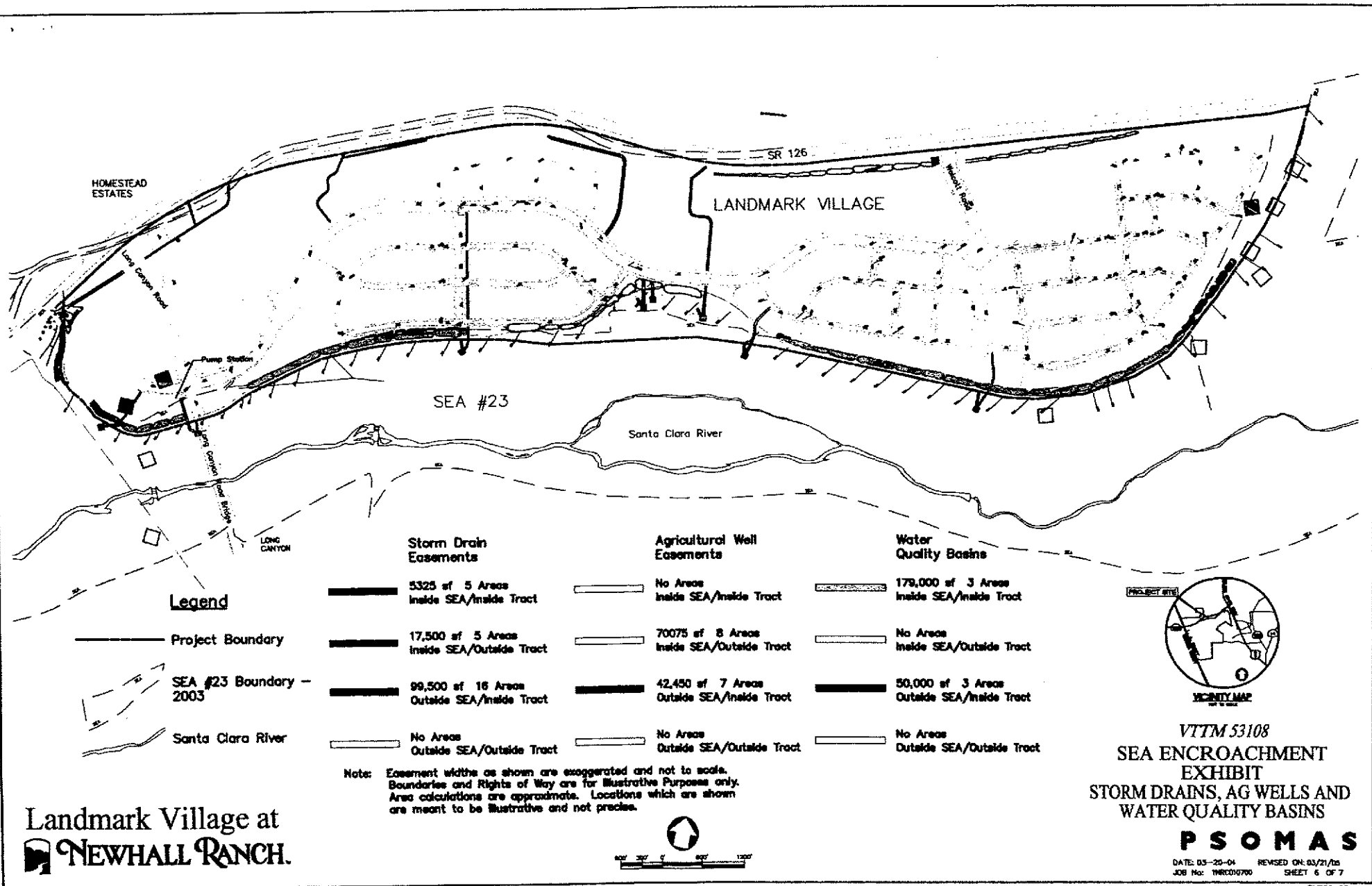


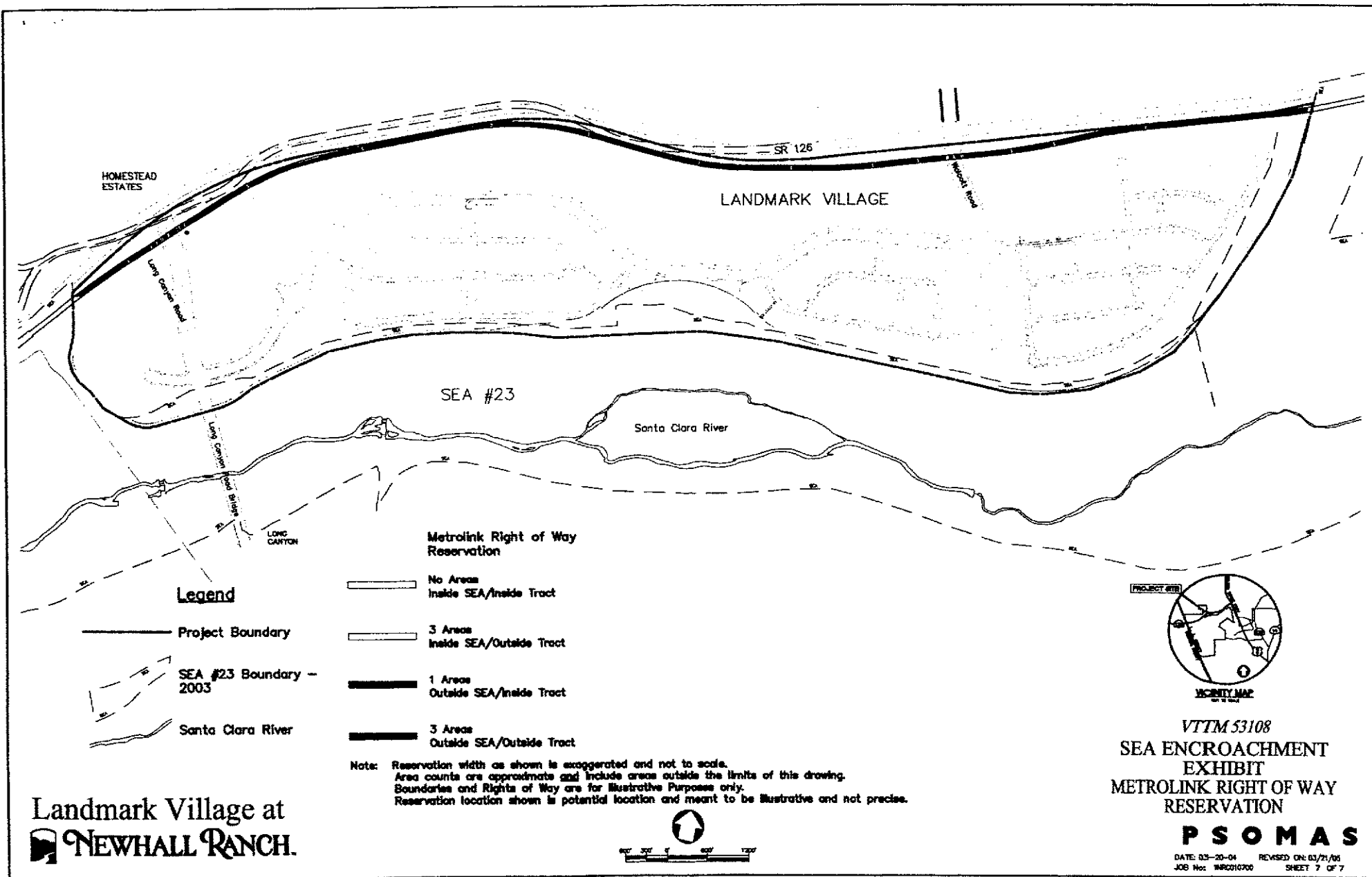
VTM 53108
SEA ENCROACHMENT
EXHIBIT
CANDIDATE
RESTORATION AREAS

PSOMAS

DATE: 03-20-04 REVISED ON: 03/21/05
JOB No: 040010700 SHEET 5 OF 7

Landmark Village at
NEWHALL RANCH.





Landmark Village at
NEWHALL RANCH.

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CONDITIONAL USE PERMIT
BURDEN OF PROOF
FOR (1) OFF-SITE TRANSPORT OF MATERIALS,
(2) GRADING OF DEBRIS BASINS, AND
(3) GRADING FOR THE WIDENING OF SR-126.
VTTM No. 053108

Background

In order to implement the development of Landmark Village (formerly River Village), it will be necessary to import fill material from Adobe Canyon. It will also be necessary to grade for debris basins in Chiquito Canyon and grade for the widening of SR-126.

Newhall Land Company will need a net import of 6 million cubic yards of fill material from a potential borrow site (see "Proposed Adobe Canyon Borrow Site Haul Route" exhibit). The borrow site that has been identified, is located at Adobe Canyon about 4,000 feet south of SR 126, which is south of Landmark Village, south of the Santa Clara River, and east of the planned future Long Canyon Road.

There are two proposed haul routes for exporting the fill material from Adobe Canyon (see *Proposed Borrow Site Haul Route* exhibit). Newhall Land would arrange for the material to be exported via truck or scraper from two distinct locations within the borrow site. The two haul routes would then merge onto an existing agricultural crossing that would cross the Santa Clara River and enter Landmark Village. The first proposed haul route begins toward the center of the borrow site and travels west to the existing agricultural crossing. The second proposed haul route begins in the northwest corner of the borrow site and merges on to the existing agricultural crossing, which then heads north into Landmark Village (see exhibit).

It will also be necessary to grade the debris basins in Chiquito Canyon north of SR-126 concurrently with the grading required for the widening of SR-126 so as to avoid wiping out the debris basins within Chiquito Canyon from the grading of SR-126 that would occur in the future (see "Chiquito Canyon/SR-126 Grading" exhibit). The grading for the debris basins in Chiquito Canyon and the widening of SR-126 combined will involve 1,019,000 cubic yards of raw cut. The net volume (after shrinkage) of 866,000 cubic yards will be placed as fill in accordance with County Ordinance requirements in three designated locations as indicated on the exhibit.

Under the Implementation Procedures of the Newhall Ranch Specific Plan (Section 5.2 g), the "off-site transport of materials" is addressed through the Substantial Conformance process. As such, the following information is required:

- *Name and address of all persons owning all or any part of the property from which such material is proposed to be removed and to which it is proposed to be transported:*

The property owner of the borrow site and fill site is Newhall Land Company. The property owner's mailing address is:
23823 Valencia Boulevard,
Valencia, CA 91355-2194,

- *The names and address of the person or person who will be conducting the operations proposed:*

No grading contractor has been selected by Newhall Land Company.

- *The ultimate use of the property:*

As more fully described in other entitlement applications, Landmark Village is planned as a mixed-use, neo-traditional development.

Section 5.2 d of the Newhall Ranch Specific Plan requires that the Planning Director make the following findings in approving a request for Substantial Conformance:

- *The request substantially conforms with all applicable provisions of the Specific Plan and Los Angeles County ordinances which do not conflict with the Specific Plan.*

The Landmark Village site must be elevated in order to avoid flood issues. Raising the site will occur by importing fill material from the borrow site location. The request to transport material to Landmark Village in order to implement the project is consistent with the mixed-use development planned for Landmark Village as articulated in the Newhall Ranch Specific Plan. By making the site ready for development, the importation of fill will allow Landmark Village to be developed in a manner consistent with all requirements of the Specific Plan (e.g., planned uses, densities, infrastructure, parks, trails, etc.).

The (revised) Specific Plan was approved by the Board of Supervisors in 2003. The proposed grading operation is consistent with planned grading operations as depicted in the Specific Plan [see enclosed exhibit – Figure 1.0-14 (Conceptual Grading Plan)].

- *The request will not adversely affect public health and safety.*

Inasmuch as the borrow site (Adobe Canyon), import site (Landmark Village), grading sites, and transport routes are not located in any inhabitable area, there will be no adverse impacts on the public's health or safety. Before material is physically removed from the borrow site location, a soils engineer will be engaged to ensure that no slope failures will occur due to the removal of material.

- *The request will not adversely affect adjacent property.*

Adjacent property is all owned by Newhall Land Company, so no other property owner would be adversely impacted by the grading operation or transportation of fill material. Even so, there will be an on-site engineer during operations to ensure that grading does not negatively affect Newhall Land Company's adjacent ownership (e.g., causing unanticipated landslides). When the Board of Supervisors approved the (revised) Newhall Ranch Specific Plan in 2003, many grading mitigation measures were adopted that addressed aesthetics, noise, air quality (fugitive dust), re-compaction and stabilization (buttress fills, shear keys) to ensure that no property would be adversely affected.

A. *That the requested use at the location proposed will not:*

1. *Adversely affect the health, peace, comfort or welfare of persons residing or working in the surrounding area.*

Ultimately, the use of the property is the development of the community of Landmark Village. This development requires a net importation of 6 million cubic yards of fill material in order to protect the future inhabitants from potential flooding. The development will also require the grading for the debris basins in Chiquito Canyon, north of SR-126. Along with the grading for the debris basins, it will be necessary to assume the required grading for the widening of SR-126 concurrently so as to not have conflicting grading operations. The grading that is required for the widening of SR-126 is necessary to accommodate the increased traffic capacity that will result from the development of Landmark Village. Therefore, contrary to having an adverse impact, the proposed grading operations will be beneficial to the future residents and businesses at Landmark Village.

The (revised) Specific Plan was approved by the Board of Supervisors in 2003. The proposed grading operation is consistent with planned grading operations as depicted in the Specific Plan (see enclosed exhibit – Figure 1.0-14 (Conceptual Grading Plan)).

Operationally, any potential adverse effects that may arise at the grading sites, borrow site or transport routes will be addressed by incorporating recommendations from the soils engineer that address unstable slope conditions, and flag-men to facilitate truck traffic.

2. *Be materially detrimental to the use, enjoyment or valuation of property of others persons located in the vicinity of the site.*

The grading operations will be temporary in nature. Potential noise and traffic conflicts will be addressed in the Landmark Village environmental impact report, and measures will be proposed to mitigate these impacts. Properties most likely to be impacted – those adjacent to the borrow sites - are owned by the project proponent, Newhall Land Company. The applicant's soils engineer and the County Department of Public Works will ensure that slopes at the borrow sites are engineered for stability and that appropriate erosion control measures are in place.

3. *Jeopardize, endanger or otherwise constitute a menace to the public health, safety or general welfare.*

The off-site transport of fill material necessary for Landmark Village will not be a menace to the community because mitigation measures (e.g., flag-men) will be required to ensure the safe flow of traffic. The placement of the fill material at Landmark Village has been reviewed by the Department of Public Works (DPW) in connection with the review of grading and geotechnical report filed with VTTM No. 53108. DPW is satisfied that there is no danger to the public health, safety or general welfare. That is, grading is consistent with County ordinances and the recommendations and design requirements of County approval of the aforementioned geotechnical report.

When the Board of Supervisors approved the (revised) Newhall Ranch Specific Plan in 2003, many grading mitigation measures were adopted that addressed aesthetics, noise, air quality (fugitive dust), re-compaction and stabilization (buttress fills, shear keys) to ensure that no property would be adversely affected.

- B. *That the proposed site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping and other development features prescribed in this Title 22, or as is otherwise required in order to integrate said use with the uses in the surrounding area.*

The borrow site is adequate in size to allow for the removal and export of fill material without incurring any physical constraints. The location is not for

development purposes and, therefore, there is no issue relative to yards (setbacks), walls, fences, parking and loading facilities. Grading operations sites will conclude with adequate erosion control (to include landscaping) to ensure that the site is not left in a state that would otherwise be unsafe.

The recipient site – Landmark Village – will be in compliance with all the development standards required by the Newhall Ranch Specific Plan.

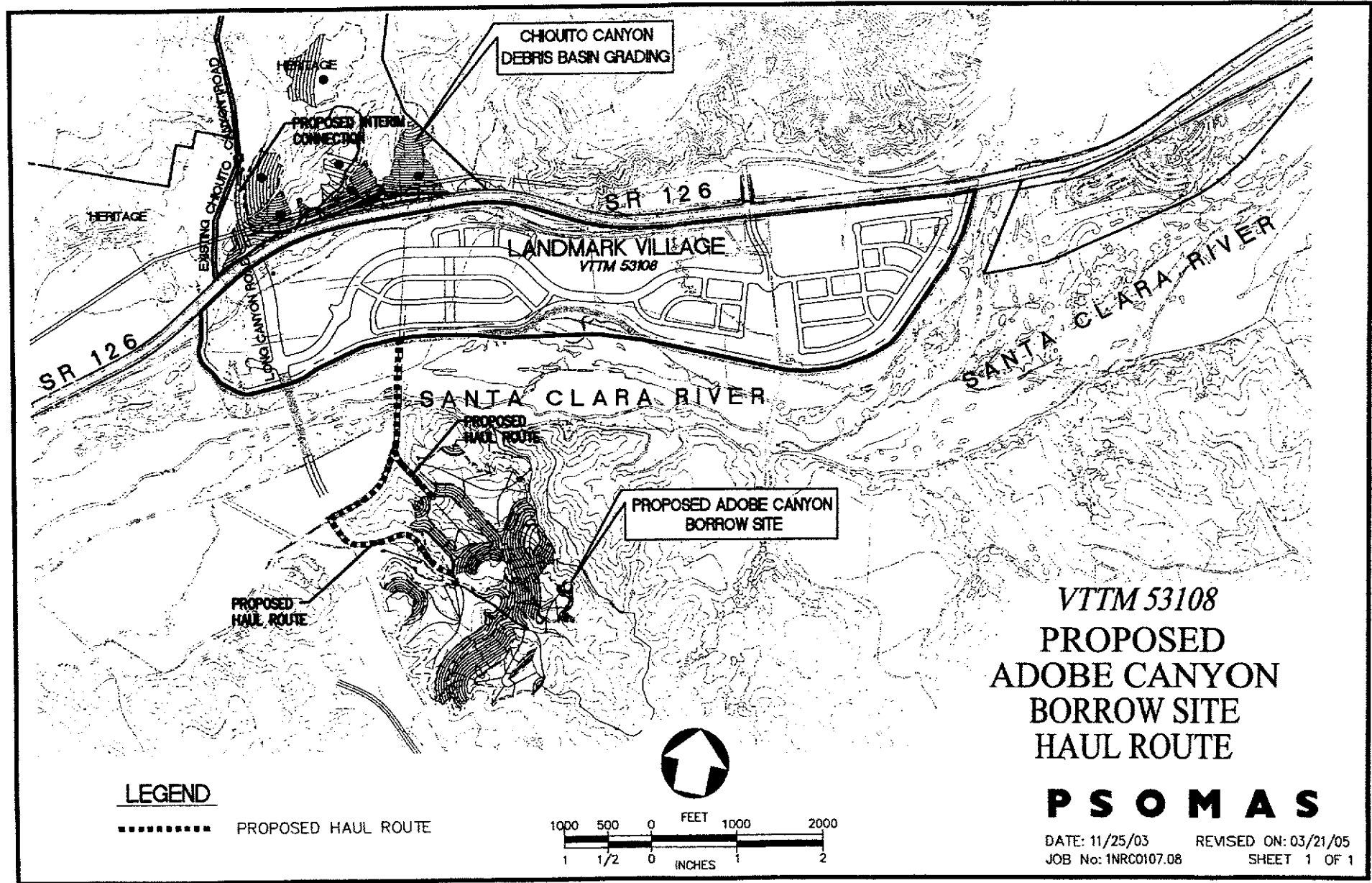
C. That the proposed site is adequately served:

- 1. By highways or streets of sufficient width and improved as necessary to carry the kind and quantity of traffic such use would generate.*

The borrow site will be adequately served by the two haul routes between the proposed Adobe Canyon borrow site and Landmark Village as shown in "Proposed Adobe Canyon Borrow Site Haul Route" exhibit and by the proposed interim connection between SR-126 and existing Chiquito Canyon Road. Landmark Village will have a sufficient circulation network to meet the operational demands of the future community.

- 2. By other public or private service facilities as are required.*

No service facilities are required at the borrow site. Landmark Village will be adequately served by public and/or private facilities. These will include not only traditional infrastructure such as sewers, storm drains, and streets, but also an elementary school, parks, and shopping.



CONDITIONAL USE PERMITS

Burden of Proof Off-site Water Tanks VTM 53108

Background

The proposed project, Landmark Village, is a master planned residential community located within the Newhall Ranch Specific Plan area. The community primarily consists of single-family and multi-family residences (including condominiums, duplexes and apartments), mixed-use/commercial development, parks, and open space. Facilities and infrastructure to support the proposed project consist of roads, trails, drainage improvements and flood protection (including buried bank stabilization within the Santa Clara River), potable and reclaimed water systems - including water tanks - and a sanitary sewer system.

To serve Landmark Village, there are two (2) proposed water tanks for reclaimed water and two (2) tanks for potable water located outside the Landmark Village project boundary (but within the NRSP area). These proposed tanks are subject to conditional use permits per Section 22.24.150 of the Los Angeles County Municipal Code.

The proposed potable and reclaimed water tank system is consistent with, and implements the Newhall Ranch Specific Plan's approved Conceptual Backbone Water Plan (Exhibit 2.5-2 of the Draft EIR). Consistent with the NRSP, the retail potable water will be provided by the Valencia Water Company. The proposed tanks will be located on three separate sites, outside the boundaries depicted on the Landmark Village tentative tract map. The sites have been selected based on the water pressure zones that have been established near the project site. The multiple tank system is necessary to ensure an adequate source of supply and storage to maintain the system's reliability, safety, and efficiency and it also provides for flexibility in the ultimate location of necessary tanks.

Two of the proposed water tanks for reclaimed water are to be located north of Landmark Village in Chiquito Canyon. This location was selected due to its natural elevation and remoteness to the project area. This area will be able to accommodate the two water tanks that would also be able to share water lines. The site would require approximately a one-acre pad to be graded for each tank. The tanks are anticipated to be 32' in height, and 132' in diameter with a capacity of 3 million gallons. The treated water will be pumped from the existing County Water Reclamation Plant (WRP) 32 located near Interstate-5 just south of Highway SR-126. The reclaimed water to be stored in the proposed tanks will be available to the community of Landmark Village and beyond for specified irrigation and firefighting purposes. In addition to the two proposed new tanks, there is a third possible reclaimed water tank location. An existing water tank located near the treatment plant by Interstate-5 just south of Highway SR-126 may be determined to be an appropriate location for the future reclaimed tank. Although it is an existing tank

originally intended for potable water, minor improvements will be necessary in order to upgrade the waterline system that connects to it.

The two water tanks for potable water are proposed to be located north of Landmark Village as well. The first tank is proposed to be located in Chiquito Canyon just south of the two proposed reclaimed water tanks mentioned above. The second tank is proposed to be located west of Commerce Center Drive, just north of an existing potable water tank that currently serves the Valencia Commerce Center located nearby. These locations were selected due to its natural elevation and remoteness to the project area. The tanks will each require approximately a one-acre graded pad area. The tanks are anticipated to be approximately 32' in height and 152' in diameter with a capacity of 4 million gallons.

Findings

A. That the requested use at the location proposed will not:

- 1) Adversely affect the health, peace, comfort or welfare of persons residing or working in the surrounding area, or**
- 2) Be materially detrimental to the use, enjoyment or valuation of property of other persons located in the vicinity of the site, or**
- 3) Jeopardize, endanger or otherwise constitute a menace to the public health, safety or general welfare.**

The proposed water tanks in Landmark Village will not adversely affect the health, peace, comfort or welfare of persons residing or working in the surrounding area. Rather, the proposed water tanks will serve the needs of residents of Landmark Village as well as other surrounding Newhall Ranch developments. The potable water tanks will be able to service the communities with safe and quality drinking water. Even more, the reclaimed water will significantly contribute to water conservation as it will be able to offer treated water for irrigation and firefighting purposes.

The proposed water tanks will not be materially detrimental to the use, enjoyment or valuation of property of other persons located in the vicinity of the site. The two locations for the proposed potable water tanks have been strategically selected to consider a natural elevation that would provide adequate water service in an efficient manner as well as minimize any possible negative impacts from the communities. The locations are located so that they may adequately serve Landmark Village in addition to its surrounding communities. In addition, the proposed site for the second potable water tank located west of Commerce Center Drive already contains an existing water tank that serves the Valencia Commerce Center. The sites for the reclaimed water tanks have also been selected to consider efficiency of service as well as the visual impacts from the residents in the community. The two new reclaimed water tanks are to be located in Chiquito Canyon just north of the proposed potable water tank.

The proposed water tanks will not jeopardize, endanger or otherwise constitute a

menace to the public health, safety or general welfare. Rather, they are necessary for provision of a necessary resource. The potable tanks will provide quality drinking water, a necessary resource and the reclaimed water tanks will assist in potable water conservation by using reclaimed water for irrigation and other purposes.

B. That the proposed site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping and other development features prescribed in this Title 22, or as is otherwise required in order to integrate said use with the uses in the surrounding area.

The three sites for the proposed tanks are adequate in size and shape to accommodate the two water tanks. As mentioned above, the sites have been selected after careful consideration of impacts to neighboring communities as well as taking advantage of the natural elevation that provide for an efficient delivery system minimizing the aid of pumps and other machinery. Each site will require a one-acre graded pad, approximately. The requests for the necessary off-site grading and improvements related to the water tanks have been included in an accompanying request for a conditional use permit. The tanks do not require any parking or loading spaces, although there will be vehicular access to the tanks should any future maintenance be required. The tanks will be hidden from view by a 30-foot berm surrounding them. By sinking the tanks into the landscape and berming the edge, the water tanks will be fully integrated with the surrounding area and have minimal visual impact.

The water tank options have been discussed in the Environmental Impact Report (EIR) and are depicted on the tentative tract map (VTTM) 53108. The proposed project would be developed in conformance with all applicable County Codes including, but not limited to, the Subdivision Code, Grading Code, Building Codes and all required mitigation measures.

C. That the proposed site is adequately served:

- 1) By highways or streets of sufficient width and improved as necessary to carry the kind and quantity of traffic such use would generate, and**
- 2) By other public or private service facilities as are required.**

The three sites will take access from public/private streets. Since two of the three sites – west of Commerce Center Drive and the site near the County WRP 32 – contain existing tanks, minor improvements will be necessary to upgrade access from public/private roads to the graded across for each tank.. The proposed site for the one proposed potable and two proposed reclaimed tanks in Chiquito Canyon will require new construction vehicular access to each of the graded pad areas.

Landmark Village has been designed to be in conformance with the approved the Mobility Plan (Section 2.4) of the Newhall Ranch Specific Plan, which provides for a hierarchy of highways and streets that will provide a safe and efficient circulation system. The residential communities will be directly served by a system of public,

“private and future” streets and private drives, which meet Department of Public Works and Fire Department access criteria.

Highway and street widths and standards will be reviewed and approved by the County's Subdivision Committee, which would specify conditions of approval for the subdivision. In addition, a traffic modeling study will be completed using the methodology and standards specified by Los Angeles County, and utilizing the Los Angeles County/City of Santa Clarita Consolidated Traffic Model. The traffic studies for the project will be incorporated into the Draft EIR. The project would conform to all conditions of approval for VTTM 53108, as well as to all required mitigation measures.

No other public or private services are necessary for the tanks.

Request for OAK TREE PERMIT



Los Angeles County DEPARTMENT OF
320 West Temple Street, Los Angeles, Ca, 90012

Regional Planning

NOTE: It is the applicant's responsibility to notify the Planning Director of any change of the principals involved in this case prior to the completion of processing.

CONCURRENT CASES: _____

VTM 53108 / Oak Tree Permit 00-196

APPLICANT

Name
Newhall Land
Address
23823 Valencia Blvd.
City
Valencia, CA 91355
Telephone
(661) 255-4217

PROPERTY OWNER

Name
Newhall Land
Address
23823 Valencia Blvd.
City
Valencia, CA 91355
Telephone
(661) 255-4217

OWNER'S AUTHORIZATION:

I certify that I am the owner of the herein described property and permit the application to file this request.

Location (i.e. address or general description of location) and legal description of property in question: (use additional sheets as necessary) Generally south of State Route 126 & north of the Santa Clara River.
Legal description: PARCELS 14, 15, 16, 17 OF PARCEL MAP 24500-01 PMB 29.3-34 / 67, RECORDS OF LOS ANGELES COUNTY.

How many oak trees will be cut, removed, relocated, damaged or will have encroachments into their protected zone? 67 will be removed and 14 may be subject to damage. (81 trees total will require an Oak Tree Permit.

How many oak trees will remain? 120

Will trees be replaced? Yes If yes, indicate the proposed size, type, location (indicate on site plan) and schedule planting. Oak trees removed will be replaced by a tree of the same species at a ratio of 2:1.

Schedule of planting is to be determined.

BURDEN OF PROOF

Submit additional sheets describing how the following findings will be satisfied.

- A That the proposed construction or proposed use will be accomplished without endangering the health of the remaining trees subject to this Part 16, if any, on the subject property, and
- B That the removal or relocation of the oak tree(s) proposed will not result in soil erosion through the diversion or increased flow of surface waters which can not be satisfactorily mitigated, and
- C That in addition to the above facts at least one of the following findings apply:
 - 1. That the removal of oak tree(s) proposed is necessary as continued existence at present location(s) frustrates the planned improvement or proposed use of the subject property to such an extent that:
 - a Alternate development plans cannot achieve the same permitted density or that the cost of such alternative would be prohibitive, or
 - b Placement of such tree(s) precludes the reasonable and efficient use of such property for a use otherwise authorized, or
 - 2 That the oak tree(s) proposed for removal or relocation interfere with utility service or streets and highways either within or outside of the subject property and no reasonable alternative to such interference exists other than removal of the tree(s), or
 - 3. That the oak tree(s) proposed for removal, with reference to seriously debilitating disease or danger of falling, is such that it cannot be remedied through reasonable preservation procedures and practice.
 - 4. That the removal of the oak tree(s) proposed will not be contrary to or be in substantial conflict with the intent and purpose of the oak tree permit procedure.

Oak Tree Permit 00-196
Project Description and Burden of Proof
VTTM No. 53108
Landmark Village

In connection with Vesting Tentative Tract Map 53108, an oak tree permit is requested to remove or possibly impact a total of 81 oak trees. There are a total of 201 oak trees within the Landmark Village Planning Area (which includes Landmark Village VTTM 53108, all proposed grading limits and the area within 200 feet of the proposed grading line). Of the total 201 oak trees that were surveyed, 67 trees are proposed to be removed, 14 may be impacted from operations occurring within the protective zone of the tree, and the remaining 120 oak trees will not be impacted.

The following matrix summarizes the number, location and proposed action for each tree:

Oak Tree Survey Matrix

Landmark Village				
	Removed	Impacted	No Impacts	Total
Heritage Oaks	10	3	15	28
Non-Heritage Oaks	57	11	105	173
Total	67	14	120	201

- A. That the proposed construction or proposed use will be accomplished without endangering the health of the remaining trees subject to this Part 16, if any, on the subject property.

Implementation of Vesting Tentative Tract Map No. 53108 will not endanger the health of the 120 remaining oak trees (15 of which are heritage oak trees) located within the Landmark Village Planning Area. Mitigation measures and preservation guidelines have been established for the 14 oak trees proposed to be subject to temporary impacts, as well as for the 120 trees that will remain (e.g. fencing).

The applicant proposes to preserve and protect the remaining 120 oak trees within the impacted area. Protective fencing will be provided and placed at the limits of the protective zone for individual or group of oak trees within the Landmark Village Planning Area. This protective measure will remain in place until construction is completed. To ensure full protection of the health of these trees, no encroachment will occur within the protected zones per §22.56.2060 of Los Angeles County Code.

In addition, equipment damage to any parts of the remaining trees shall be avoided during project construction and development. No storage, dumping or temporary structures shall be permitted within the protective zone of any remaining oak tree.

- B. That the removal or relocation of the oak tree(s) proposed will not result in soil erosion through the diversion or increased flow of surface waters which can not be satisfactorily mitigated.

The proposed removal of 67 oak trees and the impact to 14 oak trees will not result in any additional soil erosion through diversion or increased flow of surface waters, which cannot be satisfactorily mitigated through on-site drainage control measures that shall be implemented with the project.

The proposed project incorporates the Landmark Village drainage and water quality plan which is designed to both protect development and control the drainage and pollutants. The features of this plan are intended to blend into the community as an extension of the landscaping. All drainage entering and originating within the project area will be collected and controlled by the constructed drainage system to ensure no increase in site erosion.

Any grading that will occur beyond the actual tract map border in association with grading to yield import material for the development will follow the recommendations of the soils engineer to avoid soil erosion.

- C. That in addition to the above facts at least one of the following findings apply:
- 1) That the removal of oak tree(s) proposed is necessary as continued existence at present location(s) frustrates the planned improvement or proposed use of the subject property to such an extent that:
 - a. Alternate development plans cannot achieve the same permitted density or that the cost of such alternative would be prohibitive and,
 - b. Placement of such tree(s) precludes the reasonable and efficient use of such property for a use otherwise authorized.

Most of the trees proposed for removal and to be impacted are located in areas where fill will be taken for importation to Landmark Village. The project applicant identified these sites as a source of fill material because the impacts to oak trees were less than alternative locations.

- 2) That the oak tree(s) proposed for removal or relocation interfere with utility service or streets and highways either within or outside of the subject property and no reasonable alternative to such interference exists other than removal of the tree(s).

Not applicable.

- 3) That the oak tree(s) proposed for removal, with reference to seriously debilitating disease or danger of falling, is such that it cannot be remedied through reasonable preservation procedures and practice.

Not applicable.

- 4) That the removal of the oak tree(s) proposed will not be contrary to or be in substantial conflict with the intent and purpose of the oak tree permit procedure.

The proposed removal of 67 trees and impact to 14 trees will not be contrary to, or be in substantial conflict with, the intent and purpose of the oak tree permit procedure as mitigation measures will be implemented to offset the removals. The grading required for geotechnical stability, access and site balance is necessary to develop the property in the most efficient manner. Without the grading and fill import, the site cannot be developed to the density permitted by the Newhall Ranch Specific Plan. No reasonable alternative to such interference exists other than the removal of the trees.

The applicant has taken great care in identifying export sites to minimize the number of trees which need to be removed in the development process. The applicant recognizes the significance of oak trees as historical, aesthetic and ecological resources that enhance the value of property and character of the communities in which they exist.

The applicant is committed to maintaining the healthy condition of all oak trees to be retained. For each tree removed, a minimum of two (2), 15-gallon replacement trees will be planted, resulting in a greater number of oak trees on site. These replacement trees shall be located at areas consistent with the proposed design plan and as directed by the County Forester. The project proposes to provide several areas designated for tree replacement.

Landmark Village Oak Tree Report

The Landmark Village Planning Area Oak Tree Report Los Angeles County, California

Prepared for:

The Newhall Land and Farming Company
23823 Valencia Boulevard
Valencia, California 91355

Prepared by:

Impact Sciences, Inc.
803 Camarillo Springs Road, Suite A
Camarillo, California 93012
(805) 437-1900

September 2006

1.0 EXECUTIVE SUMMARY

➤ Total Number of Ordinance-Size Oak Trees Surveyed	201
➤ Total Number of Oak Trees Planned for Removal	67
➤ Total Number of Oak Trees That May be Encroached Within the Protective Zone	14
➤ Total Number of Oak Trees That Would Not be Removed or Encroached, but Occur within 200 Feet from Grading Limit Line	120
➤ Total Number of Oak Trees That Would Require a Los Angeles County Oak Tree Permit (Removed + Encroached)	81

All oak trees surveyed within the Landmark Village Planning Area are displayed on attached engineering plans prepared by Psomas Engineering (Sheets 1, 2, and 3) and an aerial photograph showing the limits of the Orion Field Bank Stabilization prepared by Impact Sciences. All exhibits show oak trees occurring within the proposed grading limits and within 200 feet of the grading limit line. Table 2 on page 14 of this report lists the type of project-related impact that may occur to each oak tree, and identifies on which sheet each tree is located.

2.0 INTRODUCTION

Pursuant to the Los Angeles County Oak Tree Ordinance, removal or damage of any tree of the oak genus (*Quercus*) that is 25 inches in circumference (8 inches in diameter), or has a combined trunk circumference of any two trunks of at least 38 inches (12 inches in diameter), as measured 4.5 feet above the mean natural grade (i.e., diameter at breast height [dbh]), is unlawful without a permit (Ordinance 88-0157 1, 82-0168 2, Section 22.56.2050, 1988). Damage is defined as any act causing or tending to cause injury to the root system or other parts of an oak tree, including, but not limited to, burning, application of toxic substances, operation of equipment or machinery, paving, changing of natural grade, and trenching or excavating (i.e., encroached) within the protective zone (the area within the dripline of an oak tree and extending therefrom to a point at least 5 feet outside the dripline, or 15 feet from the trunk[s] of a tree, whichever distance is greater) of an oak tree.

2.1 Purpose

As required by the County of Los Angeles and pursuant to Section 22.56.2090 of the Los Angeles County Code, the purpose of this oak tree report is to provide information to the County on oak trees that may be removed or damaged by the development of the Landmark Village Planning Area. The parameters used to evaluate each tree that was surveyed are described on the following pages under heading 2.0, METHODS. A spreadsheet showing data collected for each oak tree surveyed is provided in Appendix A.

Offsite Improvements
Vesting Tentative Tract Map 53105
(Newhall Ranch - Landmark Village)

1. Los Angeles County Sanitation District trunk sewer located westerly to connect with Newhall Ranch Water Reclamation Plant
2. Water main extension to Valencia Water Company storage tanks and existing pipe system
3. Sewer force main easterly to Los Angeles County Sanitation District 32 Water Reclamation Plant
4. Borrow site in Adobe Canyon in order to import earth per Conditional Use Permit 200500112
5. Pedestrian Bridge located at SR-126 (northwest of project)
6. Debris Basin north of SR-126 located in Chiquito Canyon

Note: Specific details of offsite improvements may be found in the applications, Planner's Notebook or Newhall Ranch Specific Plan.

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MEMORANDUM

TO: Newhall Ranch Specific Plan Project File
FROM: James E. Hartl, AICP, Director of Planning
SUBJECT: Substantial Conformance Interpretation Pertaining to Alternate Street Sections
DATE: (____)

Approved: _____
 Initial Date

Background

Section 2.4 (Mobility Plan) of the Newhall Ranch Specific Plan addresses the required street cross-sections for the hierarchy of the Newhall Ranch roadway system. Specifically, Section 2.4 requires that local street cross-sections shall be consistent with Chapter 21 of the County Subdivision Code, and that collector street cross-sections be consistent with Exhibit 2.4-4 of the Specific Plan.

Specific Issue: Alternate Street Sections in Landmark Village

Within Landmark Village, Newhall Land Company proposes to create a neo-traditional development (TND). Unlike more conventional subdivisions, TND communities reflect a return to traditional neighborhoods that pervaded the urban landscape prior to World War II, and before new suburban developments became automobile dependent.

TNDs are designed for walkability and mixed-use, and they typically have a main street, rectangular street grid section, and common open space. Because TNDs stress pedestrian orientation over automobile usage, the streets in these communities are narrower in width than conventional subdivisions and have other traffic calming features (e.g., chokers, neck-downs, traffic circles, speed tables).

In order to implement the TND street design criteria, beginning in 2000, Newhall Land Company began a dialogue with representatives of the Regional Planning Department, Public Works Department and Fire Department to ensure that the proposed alternative street cross-section design for the low-volume local streets and Landmark Village's one collector street ("A" Street) would continue to meet the needs of these departments, particularly as the proposed design related to traffic capacity and life/safety issues. In the ensuing period of time, a number of meetings have occurred, and an agreement between Newhall Land Company and the aforementioned County departments has been reached

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with is reflected in the alternative local street and collector street cross-sections which are illustrated as an attachment to this memorandum.

Conclusion

Under the provisions of Substantial Conformance (Section 5.2) of the Newhall Ranch Specific Plan, "Adjustments to the plans contained in Chapter 2, Development Plan, such as the Master Circulation Plan, any of the roadway sections (emphasis added), the Master Trails Plan, any of the trails sections, the Conceptual Backbone Water, Sewer, and Drainage Plans the Conceptual Grading Plan, or the Recreation/Open Area Plan which do not change the requirements of providing adequate infrastructure"...are eligible for the Substantial Conformance entitlement process.

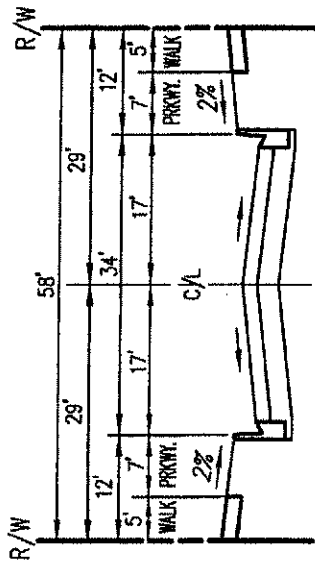
Inasmuch as the affected County departments have concluded that the alternative street sections are comparable to those street sections that would otherwise be required by the Specific Plan, or by reference the County Subdivision Code, as the Planning Director, I have determined, pursuant to Section 5.2.d of the Newhall Ranch Specific Plan that:

- (1) The proposed alternative street sections substantially conform with all applicable provisions of the Specific Plan and the County ordinances which do not conflict with the Specific Plan, and
- (2) The proposed sections will not adversely affect public health and safety and will not adversely affect adjacent property.

The abovementioned determination shall be applicable to Landmark Village only.

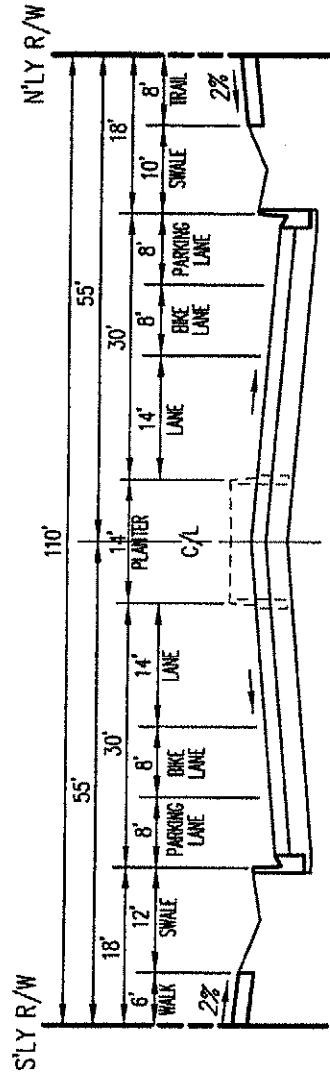
Enclosures: (1) Alternative (proposed) street cross sections
(2) Memorandum summarizing the agreement with the Fire Department and the Department of Public Works

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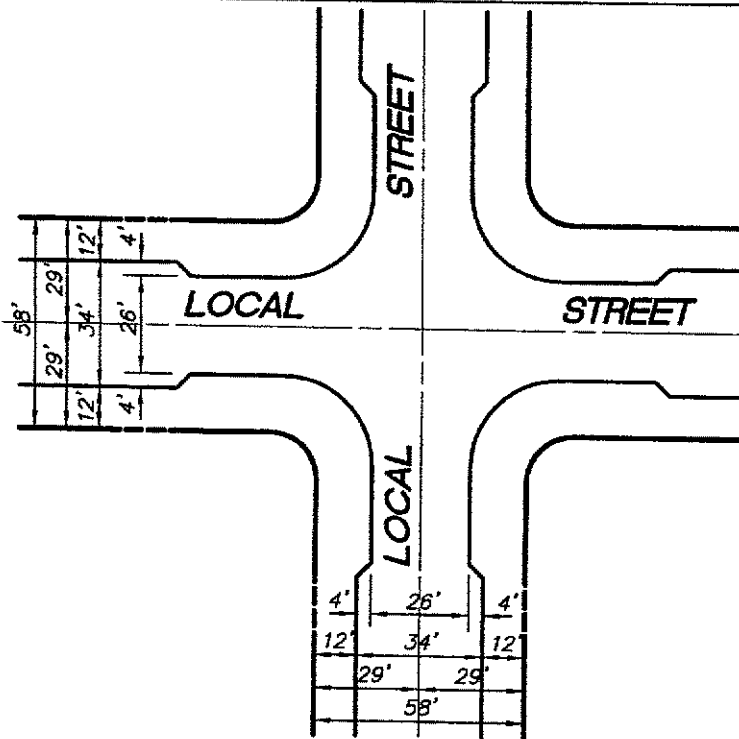
TYPICAL LOCAL STREET SECTION (58' R/W)

Local Access - 30 MPH Design Speed

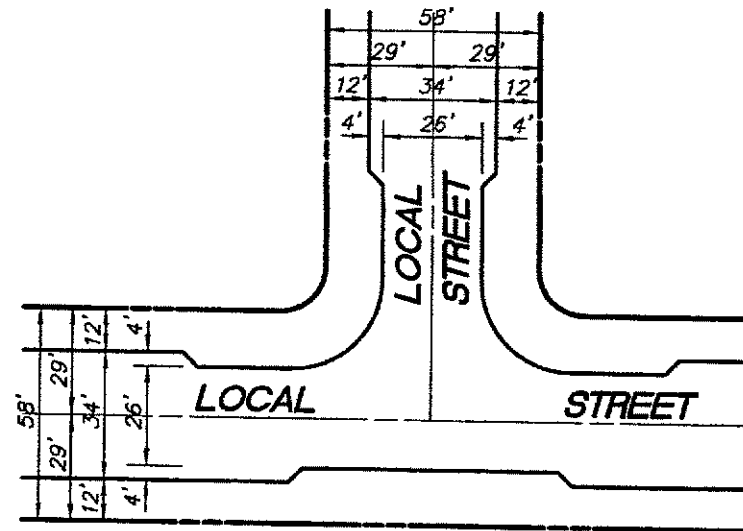


TYPICAL STREET SECTION (110' R/W)

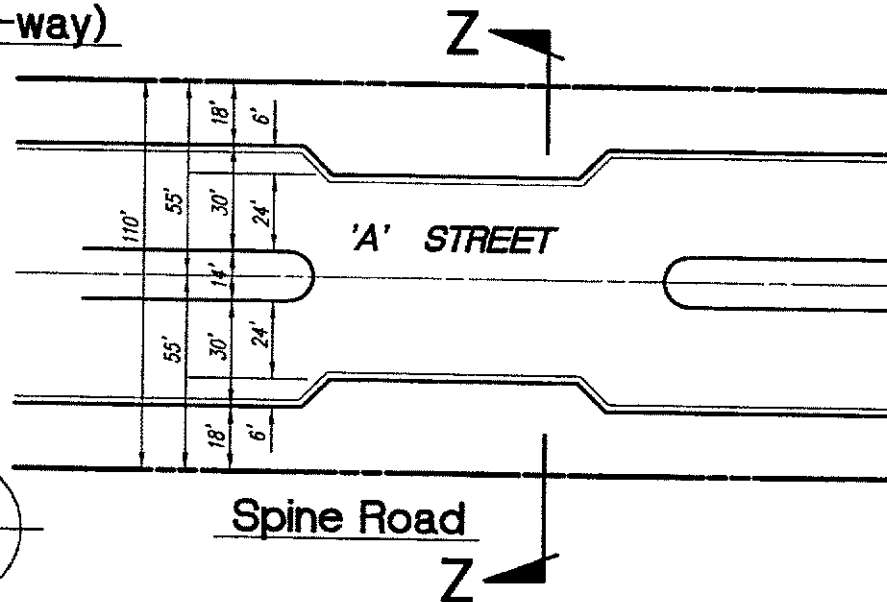
*'A' STREET (Spine Road Collector)
From 1st Roundabout to Wolcott Road
Local Access - 45 MPH Design Speed*



Local Street Intersection (4-way)



Local Street Intersection (3-way)



TYPICAL DETAIL

NOT TO SCALE

6
1

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MEMORANDUM

TO: Newhall Ranch Specific Plan Project File
FROM: Bruce McClendon FAICP, Director of Planning
SUBJECT: Substantial Conformance Interpretation Pertaining to Shared Parking
DATE: January 23, 2007

Approved: _____
 Initial *Date*

Background

Section 3.7 (Parking Regulations) of the Newhall Ranch Specific Plan specifies the regulations which govern motor vehicle parking. These regulations require parking facilities of sufficient capacity to discourage traffic congestion and provide safe and convenient facilities for motorists and pedestrians. Section 3.7 (3) (a) and (b) describe the provisions for Joint Use and Shared Parking Plan and Senior Community and/or Handicapped Parking Plans.

Specific Issue: Interpretation of the provisions of Section 3.7 pertaining to shared parking to include off-site and reciprocal parking

Off-Site, Reciprocal Parking

Development within the boundaries of the Specific Plan will include a variety of multi-family residential units expected to be designed to incorporate parking to serve residents and guests in convenient locations. The specific design may show parking which is not located on the same lot as the residential unit it serves, but instead on an adjacent lot or in a nearby parking structure or lot.

Development within the boundaries of the Specific Plan will also include commercial development designed in a variety of ways. Commercial development is anticipated to include mixed use areas, commercial centers and individual commercial lots. The specific design for the commercial uses may depict parking on adjacent lots or within parking structures.

Allowing flexibility in parking location will result in the conservation of land and promotion of efficient land use and provide convenience for future residents and patrons.

Parking Program

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Section 3.7 of the Specific Plan establishes regulations for the preparation of a Parking Program to provide an alternative to standard parking requirements. Provisions for enforcement of parking requirements and reciprocal agreements for ensuring off-site reciprocal parking be permanently maintained would be included in the Parking Program to be approved prior to the issuance of building permits.

Conclusion

Under the provisions of Substantial Conformance (Section 5.2) of the Newhall Ranch Specific Plan, "approval of a parking program, pursuant to Section 3.7 of paragraph 3" is eligible for the Substantial Conformance review process.

Inasmuch as the requested interpretation of shared parking is consistent with the provisions found in Title 22 for approval of a parking permit and as the approval of a parking program will provide the same assurances as conditions of approval typically applied to parking permits, as the Planning Director, I have determined, pursuant to Section 5.2.d of the Newhall Ranch Specific Plan that:

- (1) The interpretation of shared parking is applicable to off-site and reciprocal parking designs and substantially conforms with all applicable provisions of the Specific Plan and the County ordinances which do not conflict with the Specific Plan, and
- (2) The interpretation of shared parking will not adversely affect public health and safety and will not adversely affect adjacent property.

The abovementioned determination shall be applicable to development within the boundaries of the Specific Plan.

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MEMORANDUM

TO: Newhall Ranch Specific Plan Project File
County of Los Angeles

FROM: James E. Hartl, AICP, Director of Planning

SUBJECT: Substantial Conformance Interpretation pertaining only to
Front Setback for Single-Family Residences
Newhall Ranch Specific Plan Area

DATE: September 23, 2003

Approved: _____
 Initial *Date*

Background

As Newhall Ranch Company is proceeding with design of its initial Tract Map, an interpretation issue relative to setbacks has arisen and they have requested early input as it is fundamental to their planning and lotting. Although the Specific Plan is the broad governing document for the implementation of specific Tract Map level details, much is left to the Planning Director's discretion in interpreting the intent of the Plan's development standards, and allowing for progressive product innovation.

Specific Issue: Front Setbacks for Single-Family Detached Homes in Low (L), Low Medium (LM), and Medium (M)

Front Yard Setbacks

The Newhall Ranch Development Standards are set forth on Table 3.4-1 of the Specific Plan (see attached). The intent of the required minimum 18-foot front yard setback is to avoid blocking of sidewalks by vehicles parked in driveways. (The Specific Plan requires 18-foot garage setback for front entry garage and 10-foot garage setback for side entry garages.)

Consistent with this intent is a standard 10-foot main structure front yard setback and a variable garage setback per the individual conditions set forth below:

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Mr. James E. Hartl, AICP, Director of Planning
County of Los Angeles
September 23, 2003
Page 2

Front Entry and Side Entry Garage Setbacks

The Specific Plan is explicit in requiring an 18-foot minimum front setback for a conventional front entry garage (see Note 4 on Site Development Standards Matrix, Table 3.4-1) and requiring a 10-foot minimum front setback for a side entry garage. Exhibits 'A' and 'B' respectively demonstrate those front setbacks specified by the Specific Plan for Low, Low Medium, and Medium detached residences.

The Specific Plan is silent, however, on front yard setbacks for detached residential products featuring recessed garages and alley-loaded garages.

Recessed Garage Setbacks

Since the 18-foot front yard setback was intended to provide an adequate area for parking a vehicle in the driveway access to a garage in order to prevent the blocking of the sidewalk, it seems logical that the 18-foot setback should be applied to all front loading garages (flush conventional or recessed). Exhibit 'C' demonstrates this type product. Note that to de-emphasize the garage door, only the garage structure is subject to the 18-foot setback and the living area may remain at the 10-foot front yard setback as required by the Specific Plan. This encourages port cochere type products which improve the streetscape.

Alley Loaded Garage Setbacks

Due to the fact that no blockage of the sidewalk is in question the intent of the Specific Plan is clear that the front yard setback should be 10-feet in this case (see Exhibit 'D'). Although a rear yard setback is not required for garages with alley access, a minimum distance of 26 feet is required between the garage entrance and the opposite side of the alley.

Site Development Standards Matrix

The attached Table 3.4-1 Site Development Standards Matrix (Revised) has been amended by adjusting the matrix and notes to include the clarifications to front setbacks as discussed and demonstrated above. Namely, a 10-foot minimum front yard setback for the main structure and a garage setback determined by product type which is set forth in Notes to Table 3.4-1.

DRAFT

Mr. James E. Hartl, AICP, Director of Planning
County of Los Angeles
September 23, 2003
Page 3

Conclusion

Under the provisions of Substantial Conformance (Section 5.2) of the Newhall Ranch Specific Plan, "modification of development standards contained in Table 3.4 (Site Development Standards)" are eligible for the Substantial Conformance review process.

Inasmuch as this analysis has described the instances where interpretation of the front setback requirement as it pertains to recessed and alley-loaded garages clarifies the intent of the Specific Plan and will facilitate the processing of individual Tentative Tract Maps and is in conformance with the intent of the Specific Plan, as the Planning Director, I have determined, pursuant to Section 5.2.d of the Newhall Ranch Specific Plan that:

- (1) The proposed front setbacks for single family detached homes in Low (L) , Low Medium (LM) and Medium (M) designations substantially conform with all applicable provisions of the Specific Plan and the County ordinances which do not conflict with the Specific Plan, and
- (2) The proposed setbacks will not adversely affect public health and safety and will not adversely affect adjacent property.

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DEVELOPMENT REGULATIONS

3.4 SITE DEVELOPMENT STANDARDS

TABLE 3.4-1
REVISED SITE DEVELOPMENT STANDARDS MATRIX
Newhall Ranch Specific Plan

RESIDENTIAL SITE DEVELOPMENT STANDARDS						
LAND USE DESIGNATIONS ¹		MINIMUM LOT AREA (Sq. Ft.)	REQUIRED SETBACKS ^{2, 17}			MAXIMUM BUILDING HEIGHTS ²
			Front Yard ² (Main Structure)	Side Yard ² (Each Side)	Rear Yard ²	
ESTATE (E)		20,000	30' Min ²	15' Min	30' Min	35'
LOW RESIDENTIAL (L)		7,500	18' Min ⁴	5' Min ¹¹	20' Min ^{6, 7}	35'
LOW-MEDIUM RESIDENTIAL (LM)	Detached	2,500	18' Min ^{4, 14}	5' Min ^{5, 8, 11, 15, 16}	10' Min ^{6, 7}	35'
	Attached	2,500	18' Min ^{4, 14}	0 ^{9, 11, 15, 16}	10' Min ^{6, 7}	35'
MEDIUM RESIDENTIAL (M)	Detached	2,500	18' Min ^{4, 14}	5' Min ^{5, 8, 11, 15, 16}	10' Min ^{6, 7}	45'
	Attached	N/A	10' Min ¹⁴	0 ^{9, 11, 15, 16}	10' Min ^{6, 7}	45'
HIGH RESIDENTIAL (H) AND MIXED-USE (MU) RESIDENTIAL		N/A	10' Min	0 ^{9, 11}	10' Min ^{6, 7}	55'

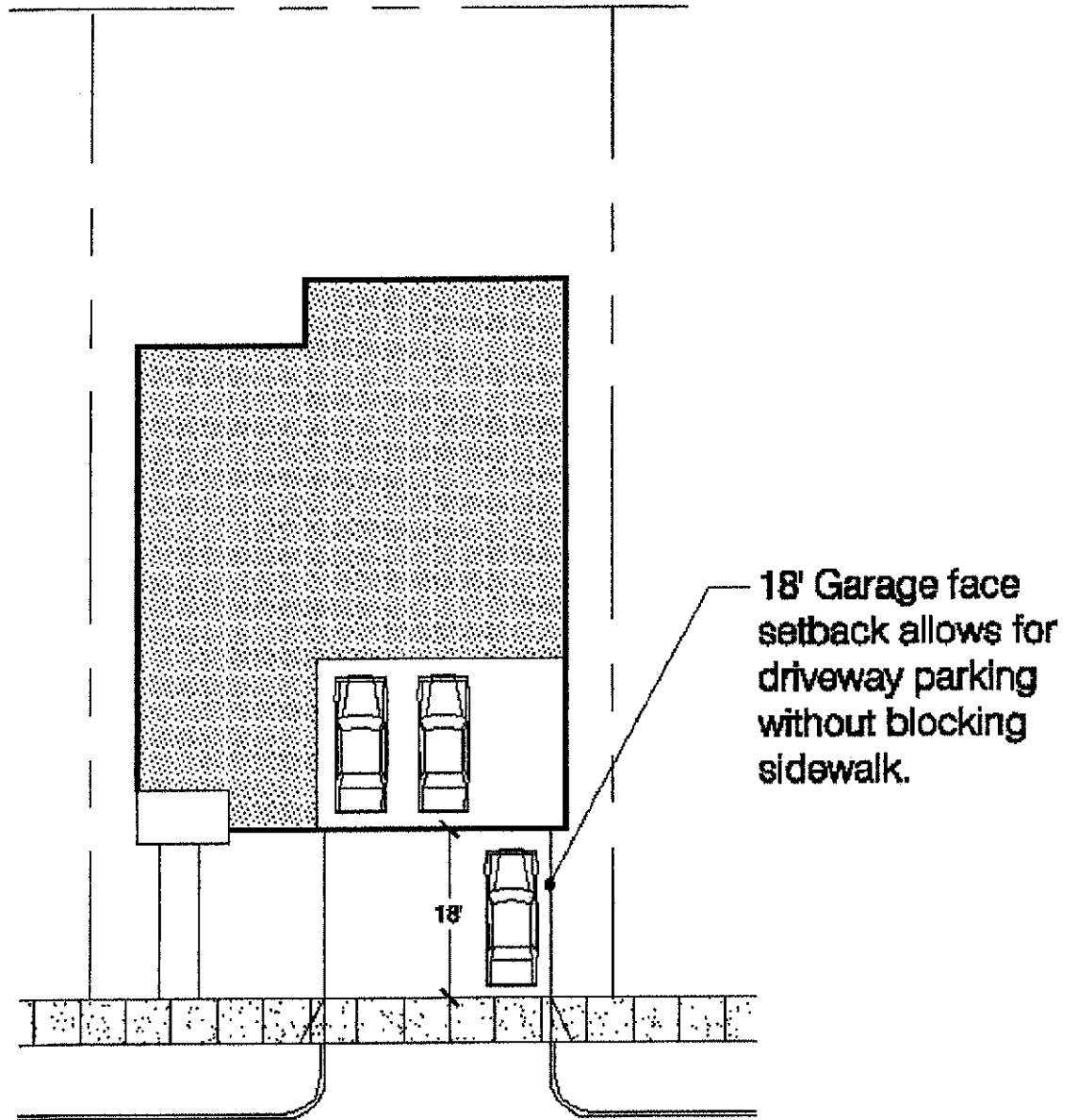
NON-RESIDENTIAL SITE DEVELOPMENT STANDARDS			
LAND USE DESIGNATIONS ¹	LOT REQUIREMENTS ¹²		MAXIMUM BUILDING HEIGHT ²
	Maximum Site Coverage ¹⁰	Minimum Front Setback	
MIXED-USE (MU) COMMERCIAL	No Max	No Min ¹³	55'
COMMERCIAL (C)	50%	20'	45'
BUSINESS PARK (BP)	50%	20'	45'
VISITOR SERVING (VS)	50%	20'	35'

MAJOR OPEN AREAS SITE DEVELOPMENT STANDARDS		
LAND USE DESIGNATIONS ¹	REQUIRED MINIMUM SETBACKS FROM PROPERTY LINE	MAXIMUM BUILDING HEIGHT ²
OPEN AREA (OA)	50'	35'
RIVER CORRIDOR SPECIAL MANAGEMENT AREA (RC)	50'	25'
HIGH COUNTRY SPECIAL MANAGEMENT AREA (HC)	50'	25'

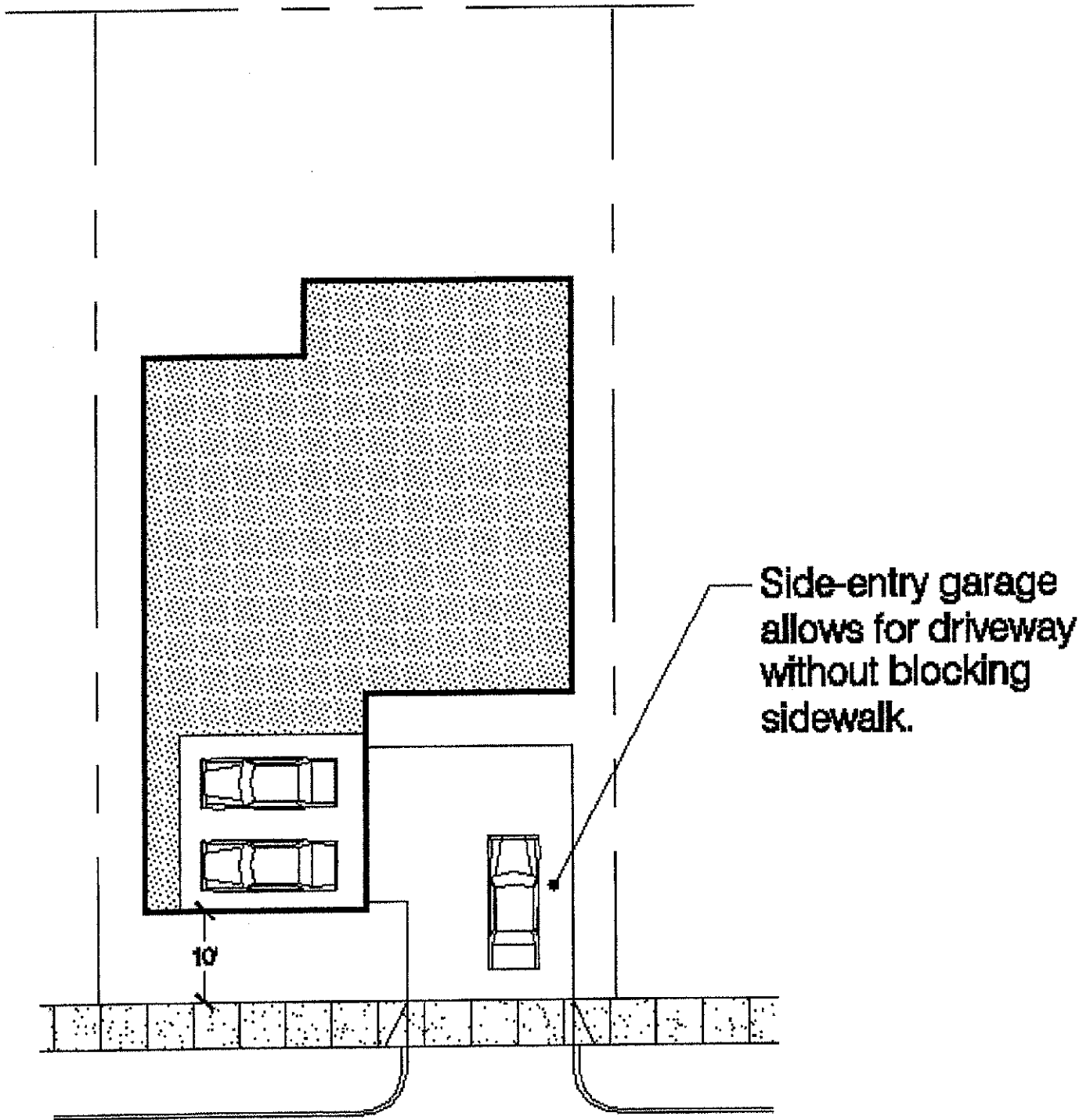
NOTES

- ¹ Other uses including land use overlays such as schools, churches, park facilities, non-residential public or private facilities, and residential/commercial conversions are subject to the site development standards of the land use designation in which they are found.
- ² A defined term — see glossary definition and/or related exhibit for full description of requirement.
- ³ Front Entry Garage: 30' min.
Side Entry Garage: 15' min.
- ⁴ Front Entry Garage: 18' min.
Side Entry Garage: 10' min.
- ⁵ Zero Side Yard Lot configuration is permitted.
- ⁶ Except where there is a detached Second Unit structure, and/or garage, where 5' minimum setback is allowed from the structure.
- ⁷ No garage setback requirement for alley access.
- ⁸ 10' minimum aggregate for two adjacent lots (e.g., 5' and 5', or 8' and 2', or 0 and 10').
- ⁹ 10' minimum building to building separation.
- ¹⁰ A minimum of 10 percent of the lot area excluding required parking shall be landscaped.
- ¹¹ 10' minimum adjacent to public street.
- ¹² 20' minimum side and rear yard setback is required when building is adjacent to a different land use designation or a public road.
- ¹³ 20' minimum is required when building fronts on a public road.
- ¹⁴ 15' minimum for clustered single-family detached and attached buildings.
- ¹⁵ 5' minimum for clustered single-family detached and attached buildings when one side of two adjacent buildings has no windows.
- ¹⁶ 12' minimum for clustered single-family detached and attached buildings when kitchen/family area faces toward zero lot line building with no windows.
- ¹⁷ If at the time building permits are issued, the County's setback standards in place at that time are more stringent than those contained in the Site Development Standards Matrix, the more stringent standards shall apply.

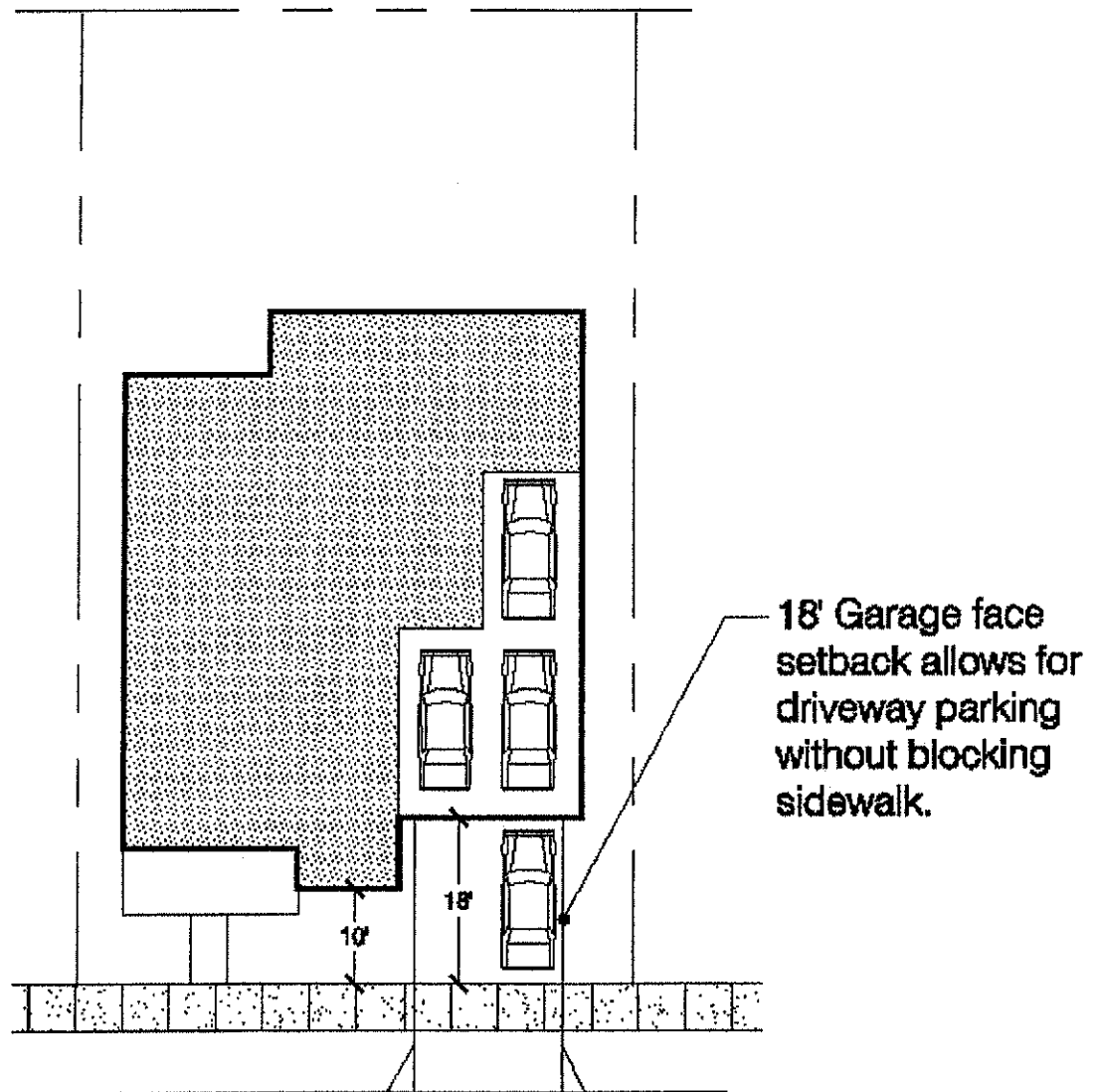
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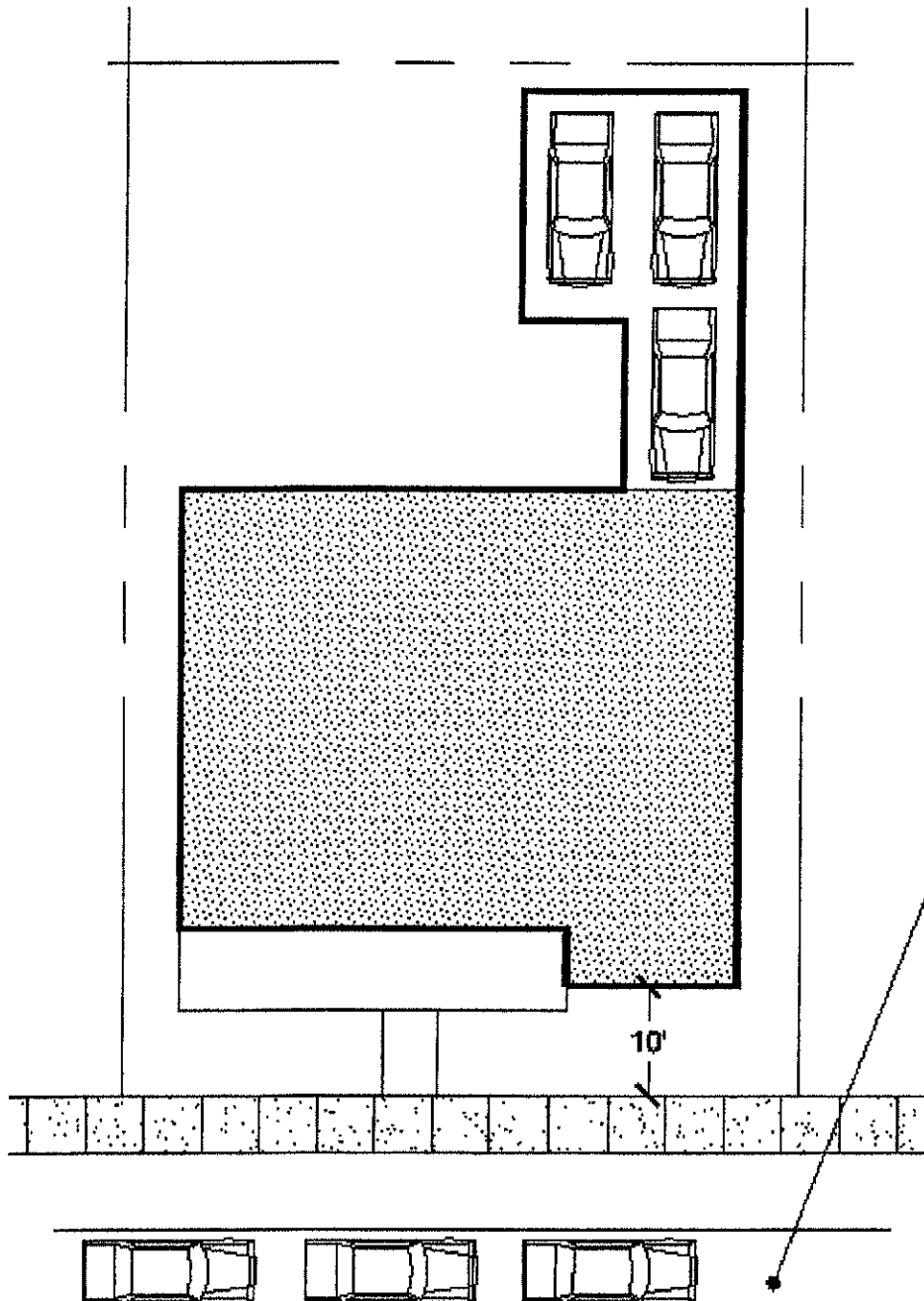
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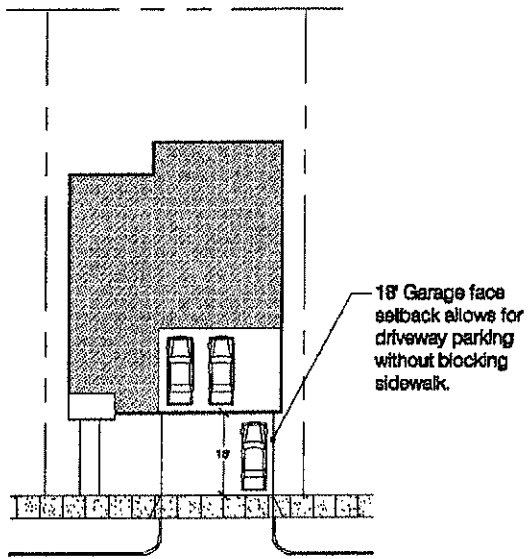


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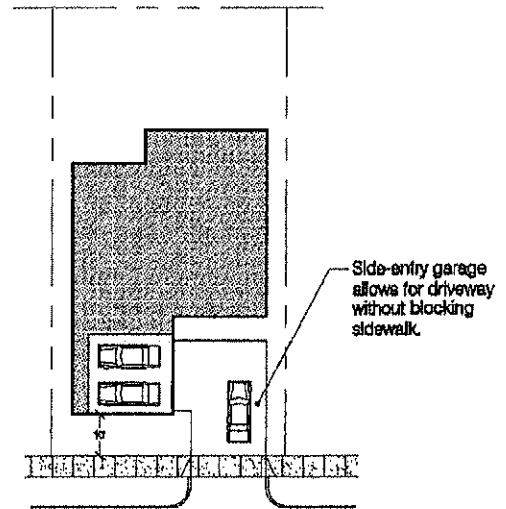


Driveway parking
replaced by
increased street
parking due to
lack of curb cuts.

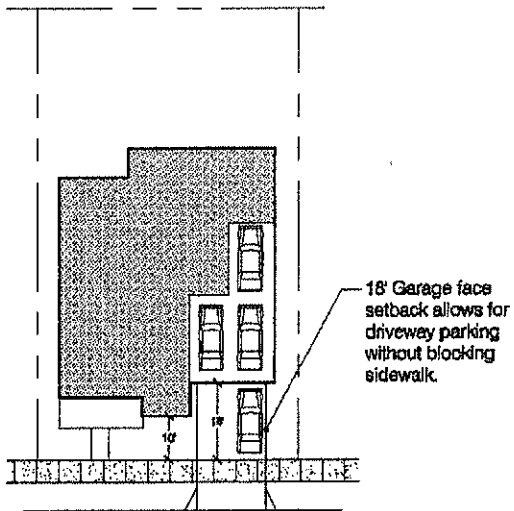
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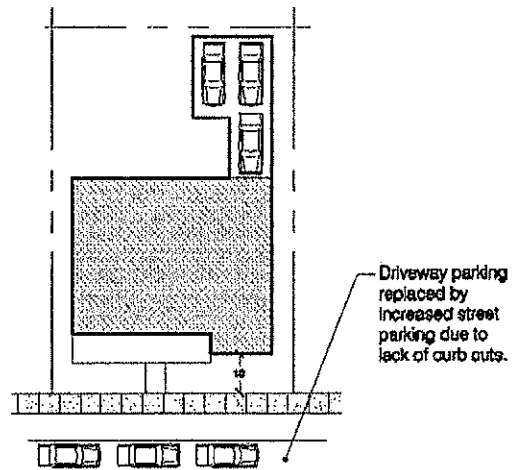
Conventional Front Entry Garage



Side Entry Garage



Recessed Front-Loading Garage



Alley-Loaded Garage

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MEMORANDUM

TO: Newhall Ranch Specific Plan Project File

FROM: Bruce McClendon, FAICP, Director of Planning

SUBJECT: Substantial Conformance Interpretation Pertaining to Off-Site Transport of Materials in Conjunction with Permitted Grading Projects and Conformance with Grading and Hillside Management Guidelines

DATE: ()

Approved: _____
 Initial Date

Background

Section 5.2(Implementation Procedures) of the Newhall Ranch Specific Plan provides for a determination of substantial conformance for transport of materials within the boundaries of the Specific Plan in conjunction with a permitted grading operation and also for determination of conformance with grading and hillside management guidelines for subdivisions having an average slope of 25% or greater in those areas to be graded .

Specific Issue: Transport of Grading Materials from the identified borrow site of Adobe Canyon to Landmark Village and Determination of Conformance with Grading and Hillside Management Criteria.

In order to implement the development of Landmark Village it will be necessary to import fill material from Adobe Canyon to elevate the site and avoid flooding issues. Newhall Land Company will need a net import of 6 million cubic yards of fill material from the identified Adobe Canyon borrow site.

There are two proposed haul routes for exporting the fill material from Adobe Canyon. The two haul routes would then merge onto an existing agricultural crossing that would cross the Santa Clara River and enter Landmark Village. The first proposed haul route begins toward the center of the borrow site and travels west to the existing agricultural crossing. The second proposed haul route begins in the northwest corner of the borrow site and merges on to the existing agricultural crossing, which then heads north into Landmark Village.

The grading operations in Adobe Canyon and Landmark Village have been designed to minimize impacts to the extent feasible. Oak trees which are removed by grading operations will be mitigated. Any erosion control requirements will be met and significant ridgelines are not impacted.

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Conclusion

Under the provisions of Substantial Conformance (Section 5.2) of the Newhall Ranch Specific Plan, "subdivisions having an average slope of 25% or greater in those areas to be graded for determination of conformance as to grading and hillside guidelines and approval of transport materials within the boundaries of the Specific Plan"...are eligible for the Substantial Conformance entitlement process.

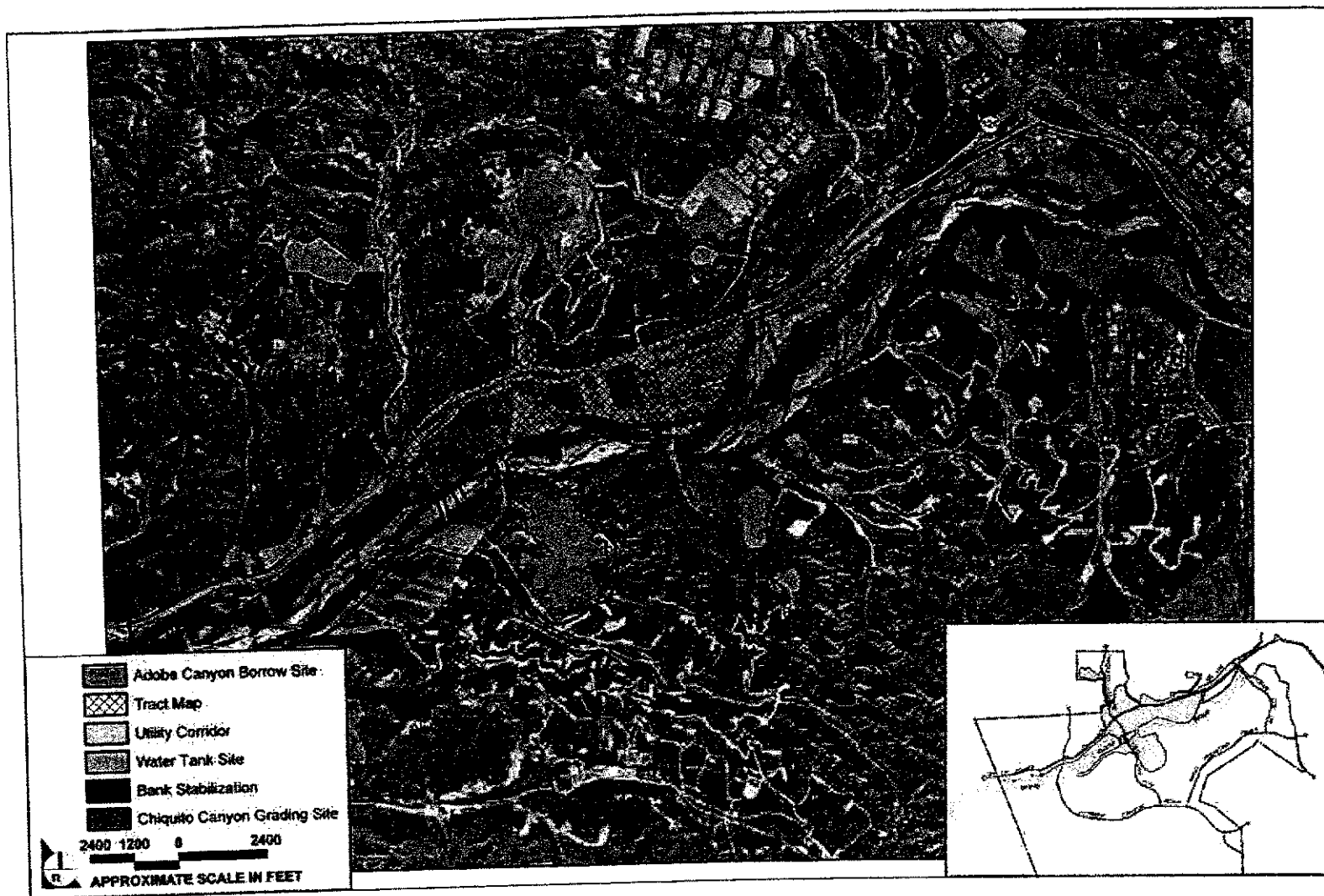
Inasmuch as the grading operations have been designed to minimize impacts to the extent feasible and that the transport routes for hauling of grading materials from the Adobe Canyon borrow site to Landmark Village follow existing agricultural roads to limit impacts to the Santa Clara River, as the Planning Director, I have determined, pursuant to Section 5.2.d of the Newhall Ranch Specific Plan that:

- (1) The proposed haul routes to transport grading materials from Adobe Canyon to Landmark Village are in substantial conformance with all applicable provisions of the Specific Plan and the County ordinances which do not conflict with the Specific Plan, grading has been designed to minimize impacts; and
- (2) The proposed haul routes and grading operations which are not located near existing residences or occupied properties will not adversely affect public health and safety and will not adversely affect adjacent property.

The abovementioned determination shall be applicable to Landmark Village only.

Enclosures: (1) Haul Route Exhibits

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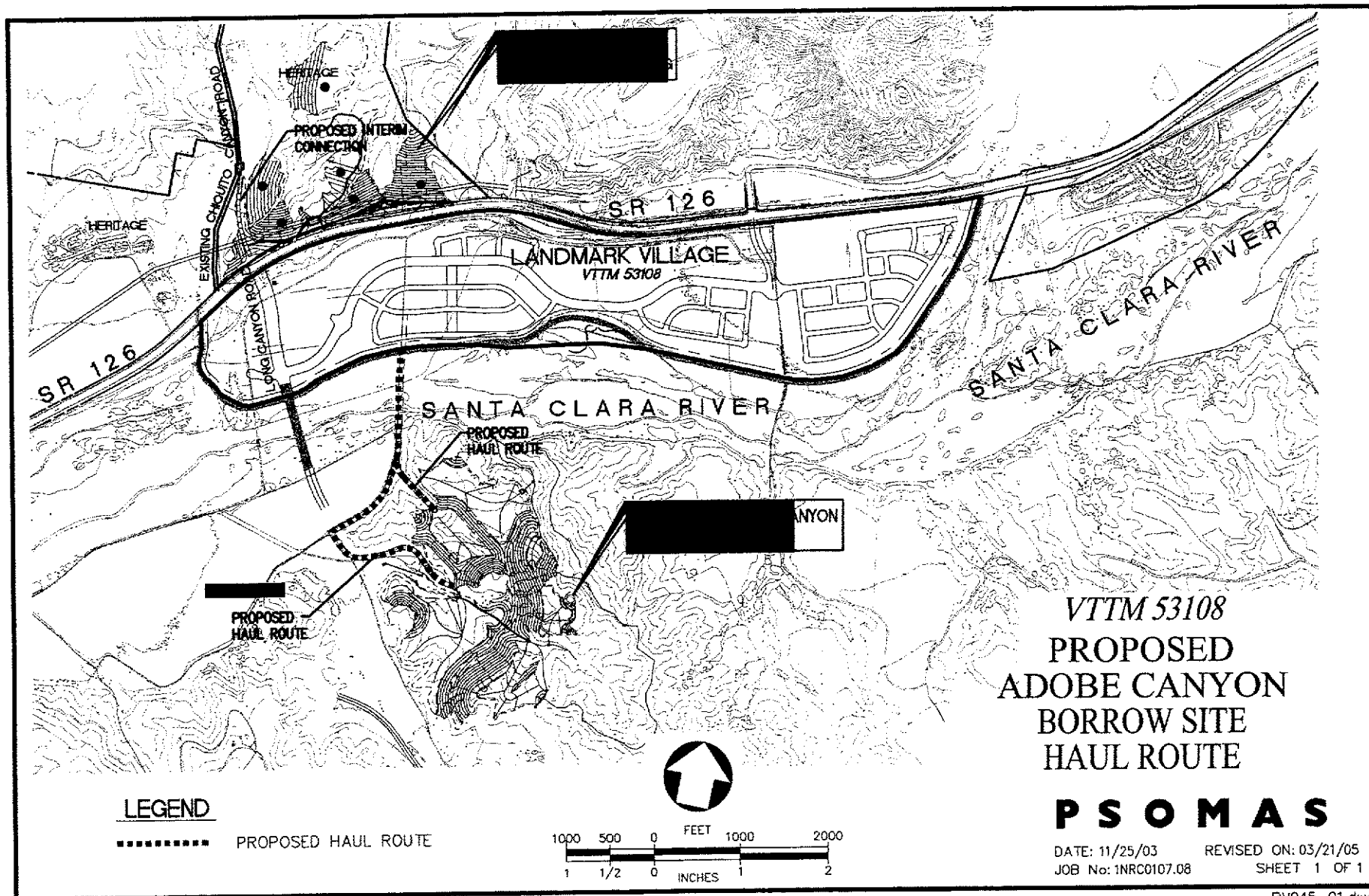


SOURCE: Impact Sciences, Inc. February 2006

FIGURE 1.0-33

Off-Site Improvements

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THE REGIONAL PLANNING COMMISSION

County of Los Angeles

AGENDA

Meeting Place: Room 150 Hall of Records
320 W. Temple Street
Los Angeles, California 90012

Meeting Date: January 31, 2007 - Wednesday

Time: 9:00 a.m.

PART I - PLEDGE OF ALLEGIANCE

1. Commission

PART II - REPORTS

2. Approval of Agenda
3. Director
4. County Counsel

PART III - MINUTES FOR APPROVAL

5. January 10, 2007

PART IV - PUBLIC HEARING

Land Divisions

6. Vesting Tentative Tract Map No. 53108, (Ms. Tae)
General Plan Amendment/Local Plan Amendment/Specific
Plan Amendment Case Nos. 00-196-(5), Conditional Use Permit
Case Nos. 00-196-(5) and 2005-01121-(5), and Oak Tree Permit
Case No. 00-196-(5) - (Landmark Village)
Newhall Land and Farming Company
Within the Newhall Ranch Specific Plan, north of the Santa Clara River,
south of Highway 126, east of Ventura County boundary and west
of Interstate 5 Freeway
Newhall Zoned District

(Continued)

- Si no entiende este aviso o necesita mas informacion por favor llame este numero (213) 974-6466.
- If you require special accommodations or material in alternate format, please contact the ADA Coordinator Office, at (213) 974-6488 (Voice) or (213) 617-2292 (TDD), with at least three business day's notice.

*** Commission Office: (213) 974-6409 ***

The length of the Commission Agenda may necessitate that some items be heard in the afternoon after a lunch break.

THE REGIONAL PLANNING COMMISSION

PART IV - PUBLIC HEARING (Cont.)

Land Divisions

- a. General Plan Amendment Case No. 00-196-(5)
To amend the Los Angeles Countywide General Plan to remove "A" Street from the County Master Plan of Highways;
- b. Local Plan Amendment Case No. 00-196-(5)
To amend the Santa Clarita Valley Area Plan to remove "A" Street from the Circulation Plan;
- c. Specific Plan Amendment Case No. 00-196-(5)
To amend the Newhall Ranch Specific Plan to downgrade "A" Street from a Secondary Highway to a local collector street;
- d. Vesting Tentative Tract Map No. 53108
To create 415 lots consisting of 308 single-family lots, 20 multi-family lots (11 condominium lots with 282 detached condos, four condominium lots with 347 attached condos in 47 buildings, three apartment lots with 451 for-lease apartments in 28 buildings, and two condominium or lease-only lots with 56 units in nine buildings), 14 commercial lots with 15 for-lease buildings, 10 commercial lots with no development planned, 12 private driveway lots, three recreation lots, two park lots, one school lot, 25 open space lots and 20 open space/desilting basin lots on 292.6 acres;
- e. Conditional Use Permit Case No. 00-196-(5)
To ensure compliance with the requirements of development within a Significant Ecological Area/Special Management Area and onsite project grading;
- f. Conditional Use Permit Case No. 2005-01121-(5)
To ensure compliance with the requirements for offsite project grading and utilities, including water tanks; and
- g. Oak Tree Permit Case No. 00-196-(5)
To authorize removal of 67 oak trees (including 10 heritage oaks) and encroachment into the protected zone of 14 oak trees (including three heritage oaks).

THE REGIONAL PLANNING COMMISSION

PART V - CONTINUATION OF REPORTS

7. Commission/Counsel

PART VI - OTHER MATTERS

8. Public comment pursuant to Section 54954.3 of the Government Code.

ADJOURNMENT TO 6:30 P.M. MONDAY, FEBRUARY 5, 2007

TIME LIMITS: The Commission has established time limits with respect to receipt of testimony regarding matters on this Agenda. Applicants will be allowed fifteen (15) minutes to present testimony in support of their application, with an additional ten (10) minutes for responses to issues raised by other witnesses. Other proponents and opponents will be limited to three (3) minutes per speaker. Responses to questions from the Commission will not be included in these time limitations. All speakers are urged to refrain from repeating testimony presented by others. The Chair may impose different time limits, depending upon the length of the agenda, the number of speakers wishing to give testimony and/or the complexity of an agenda item.

WRITTEN TESTIMONY: Written testimony that is received prior to the public hearing will be made a part of the record and need not be read into the record.

PUBLIC HEARING CLOSING AND RE-OPENING: Public hearings that are closed during the course of the meeting may be re-opened by the Commission without notice at any time prior to adjournment of the meeting.

LOBBYIST REGISTRATION: Any person who seeks support or endorsement from the Regional Planning Commission on any official action may be subject to the provisions of Ordinance No. 93-0031, relating to lobbyists. Violation of the lobbyist ordinance may result in a fine and other penalties. FOR INFORMATION, CALL (213) 974-1093.

01/31/07

RPC MEETING DATE
January 31, 2007

AGENDA ITEM NO.
6 a, b, c, d, e, f, g

REGIONAL PLANNING COMMISSION TRANSMITTAL CHECKLIST

PROJECT NO: 00-196-(5)

CASE NO. Vesting Tentative Tract Map No. 53108
General Plan/Local Plan/Specific Plan Amendment
Case Nos. 00-196-(5)
Conditional Use Permit Case No. 00-196-(5)
Conditional Use Permit Case No. 2005-01121-(5)
Oak Tree Permit Case No. 00-196-(5)

CONTACT PERSON: Susan Tae

- ☒ STAFF REPORT
- ☒ DRAFT CONDITIONS
- ☒ BURDEN OF PROOF STATEMENT (Zoning or Plan Amendment Requests)
- ☐ ENVIRONMENTAL DOCUMENTATION - Previously submitted
- ☒ THOMAS BROTHERS MAP (Identifying Subject Property)
- ☒ LAND USE RADIUS MAP
- ☒ TENTATIVE TRACT MAP
- ☒ EXHIBIT "A" MAP
- ☒ PHOTOGRAPHS
- ☒ CORRESPONDENCE
- ☒ GIS-NET MAP
- ☒ APPLICANT: LANDMARK PLANNING NOTEBOOK, JAN 2007
- ☐ _____

Reviewed By: _____





Los Angeles County Department of Regional Planning
320 West Temple Street, Los Angeles, California 90012
Telephone (213) 974-6433

PROJECT No. 00-196-(5)
TRACT MAP NO. 53108
GPA/LPA/SPA 00-196-(5)
CUP 00-196-(5), 2005-01121-(5)
OTP 00-196-(5)

RPC MEETING DATE

CONTINUE TO

AGENDA ITEM
#6 a,b,c,d,e,f,g

PUBLIC HEARING DATE
January 31, 2007

APPLICANT Newhall Land and Farming		OWNER Newhall Land and Farming		REPRESENTATIVE Psomas	
REQUEST "Landmark Village" <u>Tentative Tract Map:</u> 415 lots consisting of 308 single-family, 20 multi-family (11 condominium lots with 282 detached condos, 4 condominium lots with 347 attached condos in 47 buildings, 3 apartment lots with 451 for-lease apartments in 28 buildings, and two condo or for lease lots with 56 units in nine buildings), 14 commercial with 15 for-lease buildings, 10 commercial with no development planned, 12 private driveway, 3 recreation, 2 park, 1 school, 25 open space and 20 open space/desilting basin lots on 292.6 acres <u>General/Local/Specific Plan Amendments:</u> To remove "A" Street from the County Master Plan of Highways and SCVAP Circulation Plan, and redesignate from a secondary highway to a local collector street <u>Conditional Use Permits:</u> To ensure compliance with the requirements of development within a Significant Ecological Area/Special Management Area, onsite project grading; and offsite project grading and utilities, including water tanks <u>Oak Tree Permit:</u> To authorize removal of 67 oak trees (including 10 heritage oaks) and encroachment within the protected zone of 14 oak trees (including three heritage oaks)					
LOCATION/ADDRESS North of the Santa Clara River, south of Highway 126, east of Ventura County boundary and west of Interstate 5 ("I-5") Freeway within Newhall Ranch Specific Plan ACCESS State Route ("SR") Highway 126			ZONED DISTRICT Newhall		
			COMMUNITY Newhall Ranch: Landmark Village		
			EXISTING ZONING SP (Specific Plan)		
SIZE 292.6 Gross Acres	EXISTING LAND USE Agricultural		SHAPE Irregular	TOPOGRAPHY Slight to steeply sloping	
SURROUNDING LAND USES & ZONING					
North: Single-family residences, water tank/City of Agoura Hills			East: Single-family residences, religious facility and vacant property/City of Agoura Hills		
South: Fire station, single-family residences and vacant property/A-1-20 (Light Agricultural-20 Ac Min Area), A-1-2, A-1-10, O-S (Open Space)			West: Single-family residences and vacant property/A-1-20 (Light Agricultural-20 Ac Min Area) and City of Agoura Hills		
GENERAL PLAN	DESIGNATION		MAXIMUM DENSITY	CONSISTENCY	
Newhall Ranch Specific Plan	Portions of RW-09, 27, 29, 30, 31, 32, 33, 34a, 34b, 35, 36, 37		1,444 DU	Yes	
ENVIRONMENTAL STATUS Draft Environmental Impact Report: Impacts that cannot be mitigated to less than significant include Biota, Visual Qualities, Noise, Air Quality, Solid Waste Disposal and Cumulative Agricultural Resources.					
DESCRIPTION OF SITE PLAN ("Landmark Village") The tentative map and exhibit "A" depict the residential and commercial mixed-use development. Residential types include single-family homes, detached and attached condominiums, apartments. Also proposed are for sale and lease-only commercial uses. Onsite project grading consists of 209,000 cubic yards of cut and 5,555,400 cubic yards of fill, with 5,346,400 cubic yards of import. Offsite grading will include Adobe Canyon (cut 6,969,000 cubic yards, fill 218,000 cubic yards, export 5,705,700 cubic yards) and Chiquito Canyon (cut 1,019,100 cubic yards, fill 666,300 cubic yards fill, no export). Open space consists of 20 acres with an additional 16-acre public park and an additional approximately 19 acres of open facility open space areas. A minimum 12-foot riding and hiking trail easement is provided along Santa Clara River with additional interpretive/nature trail boardwalk to be maintained by the development's homeowners' association.					
KEY ISSUES Public has requested that a continuance be granted for the public comment period to the Draft EIR; requests are for either an additional 30 or 60 days. Original public notice period was for 60 days, and extended once to coincide with the public hearing date (If more space is required, use opposite side)					

TO BE COMPLETED ONLY ON CASES TO BE HEARD BY THE BOARD OF SUPERVISORS

STAFF CONTACT PERSON		
RPC HEARING DATE (S)	RPC ACTION DATE	RPC RECOMMENDATION
MEMBERS VOTING AYE	MEMBERS VOTING NO	MEMBERS ABSTAINING
STAFF RECOMMENDATION (PRIOR TO HEARING)		*(O) = Opponents (F) = In Favor
SPEAKERS* (O)	PETITIONS (O)	LETTERS (O)
(F)	(F)	(F)

Project No. 00-196-(5)

COMMITTEE RECOMMENDATION (Subject to revision based on public hearing)

☐ APPROVAL☐ DENIAL☐ No improvements

____ 20 Acre Lots

____ 10 Acre Lots

____ 2½ Acre Lots

____ Sect 191.2

☒ Street improvements X Paving X Curbs and Gutters X Street Lights X Street Trees

____ Inverted Shoulder

 X Sidewalks

____ Off Site Paving ____ ft.

☒ Water Mains and Hydrants☒ Drainage Facilities☒ Sewer☐ Septic Tanks☐ Other _____☒ Park Dedication "In-Lieu Fee"

SPECIAL INDIVIDUAL DEPARTMENT CONCERNS

Engineer

Road

Flood

Forester & Fire Warden

Parks & Rec.

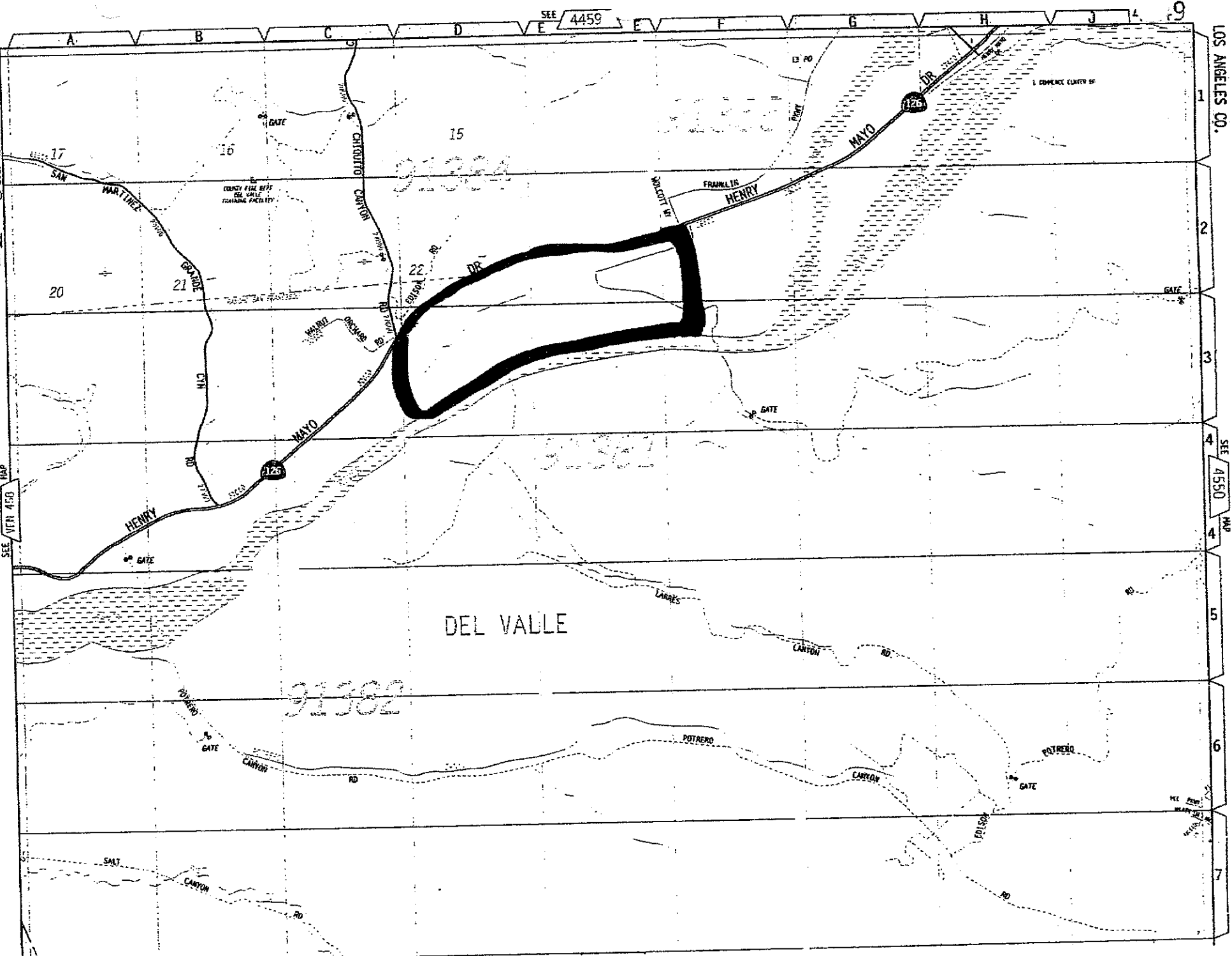
Health

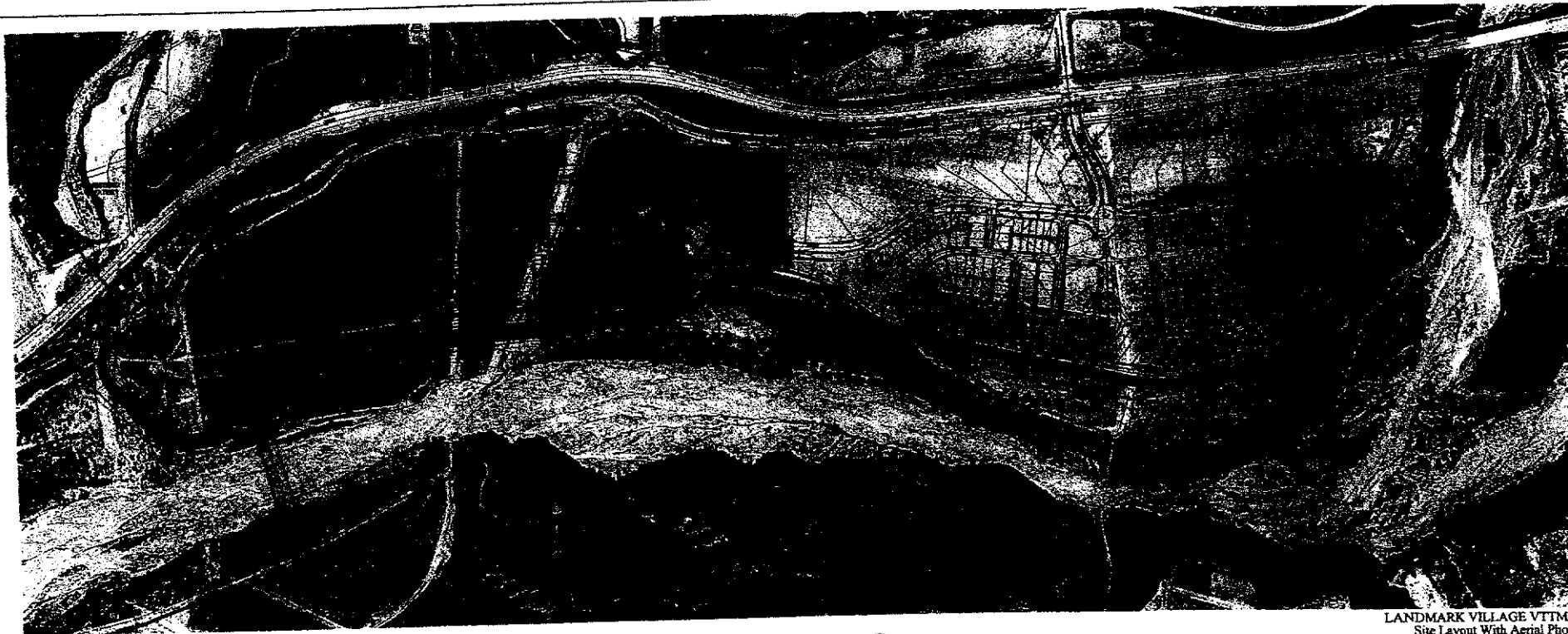
Planning

ISSUES AND ANALYSIS

The Draft EIR analyzes potentially significant impacts of the project, and concludes that impacts that cannot be mitigated to less than significant include Biota, Visual Qualities, Noise, Air Quality, Solid Waste Disposal and Cumulative Agricultural Resources.

Prepared by: Susan Tae





NEWHALL RANCH.



LANDMARK VILLAGE VTIM 53108

Site Layout With Aerial Photo

Exhibit

PSOMAS

DATE: 04-05-08

REVISED ON:

SHEET 1 OF 1

PHOTO-01

**PROJECT NO. 00-196-(5)
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LOCAL PLAN AMENDMENT CASE NO. 00-196-(5)
SPECIFIC PLAN AMENDMENT CASE NO. 00-196-(5)
VESTING TENTATIVE TRACT MAP NO. 53108
CONDITIONAL USE PERMIT CASE NO. 00-196-(5)
CONDITIONAL USE PERMIT CASE NO. 2005-01121-(5)
OAK TREE PERMIT CASE NO. 00-196-(5)**

**STAFF ANALYSIS
January 31, 2007 REGIONAL PLANNING COMMISSION PUBLIC HEARING**

PROJECT OVERVIEW

The applicant, Newhall Land and Farming Company, proposes a 291-acre master-planned neotraditional community development (known as Landmark Village) of a maximum 1,444 residential units and 1,033,000 square feet of nonresidential uses as well as 45 acres of open space, including a 16-acre community park, trail system, and elementary school. This project is within the "Riverwood" village of the adopted Newhall Ranch Specific Plan ("Specific Plan"). This project is the first within the boundaries of the Specific Plan, and located north of the Santa Clara River, south of State Route 126 ("SR-126"), east of the Ventura County boundary, and west of Interstate 5 Freeway.

The proposal requires amendments to the Los Angeles Countywide General Plan ("General Plan") and Santa Clarita Valley Area Plan ("Area Plan") to amend the Master Plan of Highways and Circulation Plan to eliminate "A" Street/Wolcott Road as a secondary highway, and amendment to the Specific Plan to downgrade "A" Street from a secondary highway to a local collector street. The project also requests approval of conditional use permits for compliance with requirements of development within a Significant Ecological Area/Special Management Area ("SEA/SMA"), onsite and offsite project grading and offsite utilities, including water tanks, and transport of materials. An oak tree permit is also required for removal of 67 oak trees (including 10 heritage oaks) and encroachment into the protected zone of 14 oak trees (including three heritage oaks). The applicant also requests a determination of substantial conformance related to shared parking, street widths, front yard setbacks and hillside resources. The Specific Plan includes a procedure for such determinations, and gives authority to the Director of the Los Angeles County Department of Regional Planning ("Planning Director") to refer to the Commission for public hearing. Such determinations for substantial conformance may apply to future projects within the Specific Plan boundary.

Access to the subject property is provided by SR-126, with internal access provided by "A" Street as a 'spine' road that provides 110 feet of right-of-way through most of the project. Connections from Highway 126 to "A" Street is provided by major highway Long Canyon Road to the west, and collector Wolcott Road to the east. The Long Canyon Road bridge is part of this project, and will span the Santa Clara River, approximately 1,100 feet in length and 100 feet in width. Two traffic circles, or 'roundabouts,' are also proposed on "A" Street within the development.

Major engineering features associated with the project include bank stabilization along the Santa Clara River and desilting basins and swales. Major offsite improvements include the creation of the utility corridor consisting of sewer trunklines to the future Newhall Ranch Water Reclamation Plan ("WRP") and existing Los Angeles County Sanitation District No. 32 WRP, and water mainline extensions; offsite debris basins and water tanks. Approximately 209,000 cubic yards of cut and approximately 5.5 million cubic yards of fill are proposed for the project, with net export from Adobe Canyon the south at 5,705,700 cubic yards. Offsite grading is also proposed at Chiquito Canyon,

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north of SR-126, with approximately 1 million cubic yards of cut and 866,300 cubic yards of fill and no export.

The Draft Environmental Impact Report ("EIR"), which is a tiered document from the certified Specific Plan EIR, analyzes potentially significant impacts of the project, including Geology and Soils, Hydrology, Water Quality, Bioa, Floodplain Modifications, Visual Qualities, Traffic/Access, Noise, Air Quality, Water Resources, Wastewater Disposal, Solid Waste Disposal, Sheriff Services, Fire Services/Hazards, Education, Parks and Recreation, Libraries, Agricultural Resources, Utilities, Mineral Resources, Environmental Safety and Cultural/Paleontological Resources. Impacts that cannot be mitigated to less than significant include Biota, Visual Qualities, Noise, Air Quality, Solid Waste Disposal and Cumulative Agricultural Resources.

DESCRIPTION OF PROJECT PROPERTY

Location: The project site is located north of the Santa Clara River, south of SR-126, east of the Ventura County boundary, and west of Interstate 5 Freeway within the Specific Plan and in the Newhall Zoned District. The project is also surrounded by area within the Castaic Area Community Standards District, but is exempt from its provisions.

Physical Features: The subject property is approximately 292.6 acres in size, and consists of four parcels. The total project, including offsite improvements, is approximately 1,044 gross acres in size. The property is irregular in shape with slight to steeply sloping terrain in offsite areas where grading is proposed. The subject property is disturbed by historic and ongoing agricultural activity but contains existing sensitive biological resources and habitat types, including upland scrub habitat and sensitive riparian habitat. The project boundary also includes coastal sage chaparral scrub, live oak woodland, southern cottonwood willow riparian habitat; and wildlife habitat including horned lizards, sparrows, blackbirds, kites, hawks and plovers, jackrabbits, woodrats and mountain lion. The Santa Clara River, which within and south of the subdivision boundary, is also an SEA/SMA.

Access: SR-126 serves as primary access to the site, with connections provided by Long Canyon Road and Wolcott Road to "A" Street that provides main internal access. Numerous public street and private driveways also serve areas within the subdivision from "A" Street.

Services: Domestic water will be provided by Valencia Water Company. Reclaimed water will be provided by either the proposed Newhall Ranch WRP, if operational at the time Landmark Village will be occupied, or the existing Valencia WRP. Sanitary service will be provided by the Sanitation District via the Newhall Ranch WRP, or existing Valencia WRP if the Newhall WRP is not yet operational. Gas utilities will be provided by Southern California Gas Company, and electricity by Southern California Edison Company. The project is within the boundaries of the Castaic School District and the William S. Hart Union High School District. Shopping and employment exist nearby including the Valencia Commerce Center directly north and east of the project. Nearby recreation areas include Magic Mountain Amusement Park and Val Verde Regional Park as well as Castaic Lake Recreation Area.

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ENTITLEMENTS REQUESTED

General Plan Amendment: The applicant requests a General Plan Amendment to amend the County's Master Plan of Highways to remove "A" Street/Wolcott Road as a secondary highway as local collector streets are not shown.

Local Plan Amendment: The applicant requests to amend the Circulation Plan of the Area Plan to eliminate "A" Street/Wolcott Road as a secondary highway and redesignate as a local collector street.

Specific Plan Amendment: The applicant requests to amend the Specific Plan's Master Circulation Plan to change "A" Street/Wolcott Road from a secondary highway to a local collector street.

Vesting Tentative Tract Map: The applicant requests approval of a vesting tentative tract map to create 415 lots consisting of 308 single-family and 20 multi-family (11 condominium lots with 282 detached condos, 4 condominium lots with 347 attached condos in 47 buildings, 3 apartment lots with 451 for-lease apartments in 28 buildings, and two condo or for lease lots with 56 units in nine buildings) lots [total of 1,444 residential units], 14 commercial lots with 15 for-lease buildings, 10 commercial lots with no development planned (reserved as rail right-of-way), 12 private driveway lots, 3 recreation lots, 2 park lots, 1 school lot, 25 open space lots and 20 open space/desilting basin lots. The applicant requests unit phasing.

Conditional Use Permit: The applicant requests approval of conditional use permits ("CUP") to ensure compliance with the requirements of development within an SEA/SMA and onsite project grading; and offsite project grading and utilities, including water tanks, and transport of materials.

Oak Tree Permit: The applicant requests approval of an Oak Tree Permit to remove 67 oak trees (including 10 heritage oaks), and encroach into the protected zone of 14 oak trees (including three heritage oaks).

While not technically an entitlement, the applicant also requests a determination of substantial conformance with the Specific Plan for shared parking, street widths, front yard setbacks, and offsite transport of materials with conformance with grading and hillside management criteria. Section 5.2.2 of the Specific Plan contains procedures for making substantial conformance determinations, with authority lying with the Planning Director of the Los Angeles County Department of Regional Planning ("Regional Planning") and the Director of the Los Angeles County Department of Public Works ("Public Works"), with discretion by the Planning Director to refer to a public hearing. While this request for substantial conformance is associated with this project, such determinations for substantial conformance may apply to future projects within the Specific Plan boundary.

EXISTING ZONING

Subject Property: The subject property is zoned SP (Specific Plan).

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Surrounding Properties: Surrounding zoning is as follows:

North: SP, A-2-2 (Heavy Agricultural – Two Acre Minimum Required Lot Area), A-2-5 (Heavy Agricultural – Five Acre Minimum Required Lot Area), M-1-½ (Restricted Heavy Manufacturing);
 East: SP, A-2-5, M-1-½, P-R (Parking Restricted) and C-R (Commercial-Recreation);
 South: SP; and
 West: SP.

EXISTING LAND USES

Subject Property: The subject property is used for agricultural activity and related storage, and consists of four parcels from the previously approved Newhall Ranch Tentative Parcel Map No. 24500).

Surrounding Properties: Surrounding uses are as follows:

North: SR-126, vacant property, scattered single-family residences, Chiquita Canyon Landfill and business parks;
 East: Castaic Creek, RV park, and further east light industrial uses, agricultural land and Valencia WRP;
 South: Santa Clara River and vacant land; and
 West: Vacant property and agricultural land.

PREVIOUS CASE/ZONING HISTORY

The current SP zoning on the subject property became effective on June 26, 2003, following the adoption of Ordinance No. 2003-0031Z, which established Zone Change Case No. 94-087-(5). The zone change was associated with the Specific Plan.

The Specific Plan was adopted by the Los Angeles County Board of Supervisors ("Board") on May 27, 2003, along with a general and local (sub-plan) amendments, a conditional use permit and a tentative parcel map. The Specific Plan authorized the development of the approximately 11,963-acre property for 20,885 dwelling units with 423 second units; 629 acres of mixed use development (including 4,101 of the 20,885 units approved); 67 acres of commercial uses; 249 acres of business park land use; 37 acres of visitor-serving uses; 1,010 acres of open area (including 141 acres of community parks and 869 acres of other open areas); 5,159 acres within SMAs; 50 acres within 10 neighborhood parks; a 15-acre lake; public trail system; 18-hole golf course; two fire stations; one public library; one electrical substation; reservation of five elementary schools, one junior high school and one high school site; a 6.8-million gallon per day WRP; and other associated community facilities, such as roads and bridges.

The Specific Plan area is organized in five "villages," with the Landmark project within the "Riverwood" Village. Within the approximately 2,330 acres of Riverwood, 3,210 dwelling units and 234 second units were approved as well as 2,966,000 square feet of nonresidential square footage. The Santa Clara River is also a major Open Area feature within Riverwood.

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A program-level EIR (and project-level for the Newhall WRP) was also certified with adoption of the Specific Plan, which had concluded that the project had significant unavoidable impacts to biological resources, agricultural resources, visual resources, air quality and solid waste disposal. In approving the project, the Board also adopted a Statement of Overriding Considerations that concluded that there were significant overriding public benefits with approval of the project. These included preservation of nearly 1,000 acres of the Santa Clara River and open areas; over 50 miles of trails including the Santa Clara River Trail; provision of improved parks, library and fire station which were 'above and beyond' mitigations required by CEQA; provision of 2,200 affordable homes; and preservation of the River Corridor to retain Santa Clara River's significant riparian vegetation and habitat.

PROJECT DESCRIPTION

Vesting Tentative Tract Map No. 53108 and Conditional Use Permit Case Nos. 00-196-(5) and 2005-01121-(5) Exhibit "A", dated November 7, 2005, depict a subdivision of 415 lots consisting of single-family, multi-family, commercial, recreation, park, school, open space and open space/public facility lots on 292.6 gross acres. The housing types range from single-family detached and attached homes as well as live-work units. Fourteen (14) commercial lots are also proposed with 15 for-lease buildings, 12 private driveway lots, three recreation lots, two park lots, and one school lot. Ten (10) commercial lots are also proposed with no development planned, and serve as reservation of future right-of-way for Metrolink. Twenty-five (25) open space lots as well as 20 open space/desilting basin lots are also depicted.

Residential

A range of housing types is provided in various clusters within the subdivision. Traditional single-family lots (i.e. one home on each lot) are clustered in three areas along the southern portion of the subdivision: to the west, across from the proposed elementary school, and to the east. These lots have been designed for garage access from the front, and by alley from the back; and range in size from minimum 3,200 square feet to 6,000 square feet.

Multi-family housing is also proposed both as for-lease apartments and for-sale condominiums, and generally in the northern portions of the subdivision and conceptual designs for site layout are depicted on the exhibit maps. Apartments, including 152 senior affordable rental units, are proposed in the western portion, just east of the office and retail center identified in the Specific Plan as the Village Center. Additional condominiums are proposed near the Village Center, north and south of "A" Street as well as north of "A" Street east of the elementary school and near Wolcott Road, with 144 single-family condo units reserved for moderate income (81 to 120 percent of the Los Angeles County median income, adjusted for family size) families between the elementary school and the commercial lots off of Wolcott Road. A total of 1,080 residential units are provided in 357 buildings.

A total of 1,388 dwelling units are provided within the residential lots.

Commercial

The Village Center, as described in the Specific Plan, is located east and west of Long Canyon Road on the western portion of the subdivision. Retail and office are anticipated, with an approximate

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maximum of 1,795,450 square feet as well as 2,958 parking spaces based on estimates of office and retail use. Internal access within the Village Center is proposed by 28-foot wide drive aisles.

Commercial is also proposed near Wolcott Road with an approximate maximum of 762,450 square feet with 490 parking spaces and 26-foot wide drive aisles.

A total of 1,033,000 square feet of office and retail commercial is proposed as well as provision of 3,448 parking spaces for 15 buildings.

Commercial – No Development Planned

Ten (10) commercial lots are proposed with no development planned. These reflect future reservation of right-of-way for Metrolink, and are located just south of SR-126 along the northern subdivision boundary, and vary in width from 35 feet to 50 feet in width.

Mixed Use

Live/work units are proposed within Lot Nos. 334 and 335 for a total of 56 dwelling units and 255,608 square feet of nonresidential uses. One hundred twelve (112) parking spaces are also provided as part of the residential component along with 30 guest parking spaces.

The project totals a maximum of 1,444 dwelling units throughout the subdivision.

Elementary School

A nine-acre elementary school site (Lot No. 345) is depicted in the approximate center of the subdivision property, north of "A" Street, and with 157 parking spaces provided at one parking space per classroom. Actual site designs for the school are to be determined through design workshops with the school district. There is a potential for joint use with the adjacent public park.

Parks/Recreation/Open Space

Two park lots are depicted within the subdivision. North of "A" Street, a public park (Lot No. 344) is proposed with active recreation, and potential for joint use with the elementary school. A passive park (Lot No. 337), south of "A" Street, will be owned and maintained by the project's homeowners' association ("HOA"). The passive park will include connections to the Regional River Trail, a 12-foot wide trail that travels along the entire length of the Santa Clara River within this development, as well as drainage and water quality basins that can also serve as additional play areas. A private interpretive trail is also proposed with an outlook point towards the Santa Clara River.

Three private recreation lots (Lot Nos. 330, 336 and 340) are proposed, with proposed improvements with grass play area, swimming pool/tot lot and recreation buildings. A total of 103 onsite parking spaces is also depicted for all three recreation lots.

A total of 45 open space lots are provided, with 25 lots for open space and 20 lots for open space and desilting purposes. These open space lots are depicted along the northern and southern boundaries of the subdivision, adjacent to SR-126 and the Santa Clara River.

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Alternate Site Plans

Alternate site plans are depicted for two areas of the subdivision. One depicts a debris basin (Lot No. 409) where detached condominiums are proposed, off of "T" Drive north of "A" Street. The inclusion of the debris basin would result in a reduction of 20 condominium units.

The other alternate site plan is for Apartment/Condominium Lot No. 349, which depicts 20 additional units from 155 to 175 attached units, in nine buildings, with associated parking increase. Total parking provided, including guest parking, is 394 parking spaces with the 175-unit alternate.

Access and Roads

Long Canyon Road and Wolcott Road are the two points of connection from SR-126 with "A" Street as the main 'spine' collector road through the development. Long Canyon Road is a major highway, and provides at least 119 feet of right-of-way north of "A" Street with bike lanes in both directions of traffic as well as an eight-foot sidewalk and varying center planter widths. SR-126 is expected to be grade-separated (higher) than Long Canyon Road in the future, with the future interchange depicted as five northbound lanes (one left turn dedicated to SR-126, two for thru traffic under SR-126, and two for right turn traffic). Long Canyon Road also spans over the Santa Clara River as an 100-foot wide bridge to be constructed with this project. Wolcott Road is a secondary highway with 106 feet of right-of-way consisting of four travel lanes, a six-foot parkway and six-foot sidewalk on each side, and a 14-foot wide planter in the center. Wolcott Road is also depicted with a future interchange with SR-126. "A" Street is depicted as with a 110-foot wide right-of-way, with varying widths of improvements. At its widest improvements, which is from Long Canyon Road to 200 feet east of Long Canyon Road, seven travel lanes are provided with bike lane on one side, and four feet of parkway and six feet of sidewalk on both sides; no on-street parking would be provided. At its narrowest, two travel lanes with center lane is provided, along with bike lanes on each side, 10-foot-parkway and six-foot sidewalk on one side, and 24 foot-wide swale and eight-foot trail provided on the other side.

Private driveway lots are also proposed within the development, providing internal access in single-family and multi-family neighborhoods between the Village Center and the park/school, with widths ranging from 34 feet to 110 feet wide.

Other features of the local roads within the subdivision are curb extensions, which serve as traffic calming details by narrowing the road to promote slowing down traffic mid-block and at intersections. Roads are depicted at minimum 26 feet wide with mid-block lanes as narrow as 24 feet wide before combining to 62 feet wide.

Grading – Onsite and Offsite

Onsite grading consists of 209,000 cubic yards of cut and 5,555,400 cubic yards of fill.

Offsite project grading is proposed in mainly three locations: Adobe Canyon, Chiquito Canyon and the Santa Clara River. Adobe Canyon is located south of the subdivision on the south side of the Santa Clara River, and will serve as a borrow site for Landmark Village. From Adobe Canyon, approximately 5.7 million cubic yards of earthwork will be moved to Landmark through haul routes that coincide with existing agricultural roads. These are existing river crossings through Santa Clara River, which also crosses the SEA/SMA, which are currently permitted as operational agricultural river crossings permitted by the California Department of Fish and Game. Adobe Canyon is within the

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Specific Plan boundary and offsite transport of materials is one of the factors eligible for a determination of substantial conformance, and being considered as part of the proposal. This borrow site is also within the boundaries of a pending subdivision known as Heritage (Vesting Tentative Tract Map No. 060678) currently being reviewed by the Los Angeles County Subdivision Committee ("Subdivision Committee"), and once approved and developed, will not remain as the graded condition depicted for the borrow site.

The Chiquito Canyon grading site proposes approximately 1 million cubic yards of cut and approximately 866,000 cubic yards of fill with no export proposed. Two debris basins are also depicted within the Chiquito Canyon area. This is also within a pending subdivision within the Specific Plan boundary within Heritage, and depicted as a future business park within the Specific Plan.

Grading is also proposed outside the boundaries of the subdivision, and within the Santa Clara River, as part of the project's mitigation and habitat restoration. The dirt that will be removed from the Santa Clara River, will be placed onto the property and the new 'edge' of the Santa Clara River would be created with the bank stabilization efforts.

Other offsite Improvements

The project also proposes offsite installation of utility extensions, including water, sanitary sewer, gravity sewer, irrigation, cable, gas, fiber optics and reclaimed water lines. Described as a utility corridor, these lines will extend east to the Valencia WRP (Los Angeles County Sanitation District No. 32) southwest of the SR-126/I-5 interchange, and extend west to the proposed Newhall WRP. Utility lines were approved as part of the Newhall Ranch CUP to be hung from the Long Canyon bridge to provide potable water, reclaimed water, etc. to areas south, and now as part of this project is proposed to be buried under the Santa Clara River to provide permanent utility connections.

The project design has been reviewed by the Los Angeles County Subdivision Committee for technical feasibility and recommended project conditions are attached.

SPECIFIC PLAN CONSISTENCY

The Newhall Ranch Specific Plan was adopted by the Board on May 27, 2003 which authorized the development of the approximately 11,963-acre property for residential, mixed use, commercial business park, visitor-serving, open area, parks, trails, schools, library, fire stations and infrastructure including roads, bridges and a water reclamation plant. The Specific Plan locates the Landmark Village subdivision within its Riverwood Village, and identifies land uses within each Village with associated acreage, density and/or nonresidential square footage. The Specific Plan also includes exhibits for trails, circulation, resource management, drainage and water quality, water and sewer as well as its land use plan.

The applicant has provided a booklet, titled "Landmark Planning Notebook" ("Notebook") which staff will refer to in discussion of consistency. This Notebook provides the detailed exhibits and tables that update the Specific Plan within the Landmark subdivision boundary, and identify goals and objectives within the Specific Plan that these project features achieve.

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Affordable Housing (Notebook Section 1.7, Page 19)

The Specific Plan also requires affordable housing, with a total of 2,200 affordable units through the Specific Plan area (Specific Plan Section 3.10). These include housing units for Very Low Income households (of which 440 are reserved for seniors), Low Income Affordable, and Moderate Income Affordable; and may be rental, for-sale and any units supported by state, local or private affordable housing assistance. An affordable housing monitoring program is required as the tentative map with the 5,000th unit has already been filed with the County.

Landmark Village proposes 296 affordable units: 144 for-sale homes for moderate income households, and 152 for-rent units for very low income seniors. While the Specific Plan states a reservation of seniors 62 years or older, the definition of "senior citizen" as defined in Civil Code Section 51.3 defines as a person 62 years of age or older, or 55 years of age or older in a senior citizen housing development.

Circulation (Notebook Section 2.1, Pages 21-26)

The applicant has requested amendments to the General Plan and Area Plan as well as the Specific Plan to redesignate "A" Street/Wolcott Road as a local collector street rather than a secondary highway. Traffic studies were performed to indicate that the traffic volume can be accommodated with the main road as a collector, and regional circulation is still ensured despite this change.

"A" Street is depicted in illustrative terms on page 23 of the Notebook, and depict "A" Street with onstreet parking, bike lanes and trails along both sides of the street. Additional photo examples of other road features within Landmark are depicted on page 26 of the Notebook, including 'round points' or roundabouts, curb extensions and rear or alley access.

While the street cross-sections proposed for Landmark are different than what was approved by the Specific Plan, a determination of substantial conformance can be made (see section below for additional information) with respect to these street cross-section differences. These changes are intended to reduce design speed, eliminate cul-de-sacs, introduce traffic-calming features, reduce street widths at pedestrian crossings, and reduce curb cuts.

Trails (Notebook Section 2.2, Pages 27-28)

The Master Plan of Trails within the Specific Plan is general in nature, and detailed trail locations are identified on the subdivision tentative map. These include walkways and parkways along streets, paseos, community trails and the regional river trail, in a hierarchy of trail sizes and functionality. Access points are also identified from the project to the regional river trail system as well as locations for observation and interpretive nature points.

The regional river trail system is depicted in greater detail on the tentative map, and depict both an eight-foot wide County trail outside the subdivision boundary but on top of the bank stabilization, and a 16-foot wide riding and hiking trail that will also serve as the Los Angeles County Flood Control access road, and will be maintained by a Landscape Maintenance District ("LMD").

An interpretive trail is also depicted through private Recreation Lot No. 337 with a lookout point and interpretive nature station.

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Resource Management (Notebook Section 2.3, Pages 29-32)

The Specific Plan also identifies viewsheds as a significant resource, and a viewshed exhibit is provided that demonstrates how the subdivision as designed is compatible with the exhibits presented to the Commission as part of the Specific Plan public hearings.

The exhibit on page 30 identifies the viewsheds unaltered by the project, substantially altered by the project development and transportation improvements, and partially altered by the project. The areas substantially altered by development, depicted in purple as B, reflect the Village Center on the western side of the development, and the single-family and mixed use development off of Wolcott Road on the eastern side. By comparison, the original viewshed exhibit depicted on page 29 reflects a larger purple area, indicating that the current analysis depicts a smaller area extent of viewshed impacts than first presented.

Additional viewshed exhibits on pages 31 and 32 depict sound attenuation walls and plexiglass walls that will also affect the viewshed from SR-126, with illustrations are provided on page 32.

The Specific Plan also includes Design Guidelines (Specific Plan Section 4.2) requirements for design review and guidelines for development along SR-126. While specific development details are not available at this time, the project will be required to undergo review for compliance, including design of the community park and building elevation reviews adjacent to SR-126.

Drainage and Water Quality Plan (Notebook Section 2.4, Pages 33-36)

The Specific Plan Master Drainage Plan has been updated to reflect innovative methodologies to meet NPDES (National Pollutant Discharge Elimination System) requirements, and reflects a comprehensive system of flood control and desilting basins to maintain water quality standards.

Open space that also double as open facility basins, are located adjacent to the subdivision boundary and the Santa Clara River to the south, as well as along SR-126 to the north. Additional water quality features such as grass swales and depressed roundabouts, provide additional area for water retention (example photos provided on page 36).

Water Plan (Notebook Section 2.5, Page 37-38)

The Master Water Plan was designed in the Specific Plan for this portion with water main and reclaimed water lines along "A" Street. The Potable and Reclaimed Water Plan on page 38 depicts in greater detail, the infrastructure lines to serve the development. The water mains still run generally along "A" Street, with connections now to residential neighborhoods north and south of "A" Street.

A 2.7 million gallon water tank that is depicted on the Master Water Plan, is depicted within the Chiquito Canyon area. Water tanks are being proposed north of Landmark at Chiquito Canyon within the Valencia Commerce Center, and Round Mountain. The potable tanks are anticipated to be approximately 32 feet high and 152 feet in diameter, with a capacity of 4 million gallons. The reclaimed tanks are anticipated to be 32 feet high, and 132 feet in diameter with a capacity of 3 million gallons.

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Sewer Plan (Notebook Section 2.5, Pages 39-40)

The Master Sewer Plan also depicts sewer infrastructure anticipated, with the sewer line system connecting to the Newhall WRP. A detailed Sewer Plan was prepared for Landmark (page 40) that provides further refinement to the location of sewer main lines. Sewer service and connections is also proposed by two methods. Connection lines are proposed to extend east to the existing Valencia WRP near the SR-126/I-5 interchange if the Newhall WRP is not operational at the time Landmark requires connection. Eventual connection for the Landmark Village development will be the Newhall WRP, which is located further west. Connections for Landmark are shown with both options.

Land Use Plan (Notebook Section 3.1, Pages 41-44)

The Land Use Plan of the Specific Plan depicts development by various land uses, and within the Riverwood Village for this property, is designated for Low-Medium Density, Medium Density, Mixed Use and Commercial as well as River Corridor. As described on page 42, flexibility was built into the Specific Plan to allow for adjustments, transfers and conversions of use, boundaries, square footage, etc. (Specific Plan Section 5.2-5, beginning Page 5-14).

The project proposes conversions as well as boundary adjustments. The Medium Density was adjusted with reduction of 1.3 acres, and the adjacent Low-Medium Density area increased by 12.1 acres. The Commercial area was reduced by 4.2 acres, while 5.8 acres of the Low-Medium Density was converted to Mixed Use. All of these changes are described in a table format on page 44, with exhibits on pages 42 and 43, and reflect that these changes are within the 20 percent adjustment established by the Specific Plan.

The elementary school as well as the community park are part of land use overlays, and are 'flexible' within the Specific Plan with respect to location. The land use overlay adjustments are also permitted by Section 5.2-5 of the Specific Plan with respect to size, quantity and location of public service facilities like parks and schools.

The River Corridor allows for certain uses, with mitigation required as stated in Section 2.6-2 of the Specific Plan. These mitigation requirements include restoration as well as enhancement, and establish requirements for management of this area. Access to the SMA through hiking, equestrian and biking trails is permitted as limited to the trail system itself. Transition areas are also required from where development lies and the Santa Clara River, which is described in greater detail in Section 2.6-2.a.(3).(b), which provides standards for the design of these transition areas. These include provision of a trail between the River Corridor and development, ungrouted rock or buried bank stabilization where required to protect development areas, and minimum 100-foot buffers adjacent to the Santa Clara River. Uses permitted within this buffer include flood control access; sewer, water and utility easements; abutments; and trails and parks; all of which are subject to the CUP provisions for development in an SEA/SMA. Grading guidelines are also provided as well as a long-term management plan.

SUBSTANTIAL CONFORMANCE

Section 5.2-2 of the Specific Plan provides a process for making determinations of substantial conformance, with authority lying with the Planning Director and in some cases, the Director of Public

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Works. This section also provides the Planning Director with discretion to refer such substantial conformance to a Commission public hearing.

The applicant requests determinations of substantial conformance for shared parking, street widths, front yard setbacks, and offsite transport of materials with conformance with grading and hillside management criteria.

Shared Parking

Parking is discussed in Section 3.7 of the Specific Plan under Development Regulations. Section 3.7-3 also identified parking programs, where joint use or shared parking plans can be requested as part of a substantial conformance review. Such a program was intended to reduce the total number of parking spaces required, and provides findings for such determination.

However, the Specific Plan does not directly address offsite, reciprocal parking, where spaces for a particular use may be provided in the number required, but may not be located on the same parcel of land as the use, and therefore would not meet the County standards for parking provision.

The applicant requests that reciprocal, offsite parking be included within the Joint Use or Shared Parking Plan option provided in the Specific Plan, with same requirements for making findings at such time when the uses are determined and actual parking requirements calculated.

Street Widths

The applicant has also requested a determination of substantial conformance for alternative street sections to reflect the intent of the development to be neotraditional, where emphasis is on pedestrian traffic as opposed to automobile traffic. Features in these alternative street sections include traffic calming devices, like chokers, curb extensions, roundabouts, etc.

Such features have been much discussed with Public Works and the Los Angeles County Fire Department ("Fire Department") as well as Regional Planning to ensure that traffic capacity and life/safety issues are still addressed with these alternative street features. These are proposed on "A" Street and internal streets.

Front Yard Setbacks

Within the development regulations of the Specific Plan, setbacks for the garage face are provided at 18 feet. The intent is for cars that are parked in the driveway, not block the sidewalk or travel lanes of the street. However, the Specific Plan did not provide in much detail, front yard setbacks for homes where the garage is oriented for a side entrance, or located in the rear of the lot for alley entrance. In these cases, the applicant is requesting that a determination of substantial conformance be made that in these cases, a minimum front yard setback of 10 feet be maintained since driveways will be such that cars parked will not block the street as the intent of the 18-foot setback.

This is a determination of substantial conformance that could apply to all area within the Specific Plan boundary.

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Offsite Transport of Materials and Hillside Grading

The Landmark project also proposes offsite transport of materials from the Adobe Canyon borrow site to the Landmark subdivision site. This is proposed to raise the boundary to avoid flooding issues with proximity to the Santa Clara River, and would use two haul routes on an existing agricultural crossing.

Grading for subdivisions with slopes over 25 percent slope, are also required to be consistent with grading and hillside guidelines. The grading that is proposed both in the Adobe Canyon borrow site and Chiquito Canyon, are within areas of the Specific Plan where other development is proposed. Therefore, the grading that will result from that needed for Landmark, will be re-graded to accommodate that proposed for Homestead (TR 060678), a pending subdivision already filed and being reviewed by the County.

While this request for substantial conformance is associated with this project, such determinations for substantial conformance may apply to future projects within the Specific Plan boundary. Draft findings of substantial conformance as proposed by the applicant are attached.

GENERAL PLAN AMENDMENT / LOCAL PLAN AMENDMENT / SPECIFIC PLAN AMENDMENT

The applicant requests an amendment to the General Plan Master Plan of Highways to delete "A" Street/Wolcott Road as a secondary highway since local collector streets are not shown on this map, and amend the Area Plan Circulation Plan and the Specific Plan Master Circulation Plan to redesignate "A" Street from a secondary highway to a local collector. Based on additional traffic analyses done for Landmark, it was determined that the traffic capacity necessary to serve Landmark Village, can be accommodated using local collector standards as opposed to wider, secondary highway standards, while ensuring a functional regional circulation system.

Within the Specific Plan, the redesignation of "A" Street/Wolcott Road would be modified on the Specific Plan Mobility Plan, Master Circulation Plan and on the accompanying cross-sections.

The applicant must meet the following burden of proof required for a plan amendment:

- A. A need for the proposed General and Local Plan Amendment exists;
- B. The particular amendment proposed is approximate and proper;
- C. Modified conditions warrant a revision to the General Plan and Area Plan; and
- D. Approval of the proposed General Plan Amendment will be in the interest of public health, safety and general welfare and in conformity with good planning practices.

The applicant's Burden of Proof responses are attached.

CONDITIONAL USE PERMIT

Pursuant to Table 3.4-2 Footnote 16, and Section 5.2-3 of the Specific Plan, and Section 22.56.215 of the Los Angeles County Code ("County Code"), the applicant has requested a CUP, and submitted an

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Exhibit "A", to demonstrate compliance with requirements of development within a SEA, project grading (onsite and offsite), and offsite utilities, including water tanks.

Within the SEA/SMA, the project proposes the following improvements: Long Canyon Road bridge, trails and scenic vista points, bank stabilization, utilities, agricultural wells, riparian mitigation, and Metrolink right-of-way easements.

The Long Canyon Road bridge will cross the Santa Clara River, and is proposed to be 1,100 feet long and 100 feet wide. The bridge crossing itself was approved as part of the adoption of the Specific Plan, where the Board found that given various options for bridge alignments and bridge span alternatives, this was one of three bridge crossings that were approved.

In addition to the standard burden of proof required for a CUP, the applicant must also meet the following burdens of proof required for:

Development within an SEA:

- A. That the requested development is designed to be highly compatible with the biotic resources present, including the setting aside of appropriate and sufficient undisturbed areas; and
- B. That the requested development is designed to maintain water bodies, watercourses, and their tributaries in a natural state; and
- C. That the requested development is designed so that wildlife movement corridors (migratory paths) are left in an undisturbed and natural state; and
- D. That the requested development retains sufficient natural vegetative cover and/or open spaces to buffer critical resource areas from said requested development; and
- E. That where necessary, fences or walls are provided to buffer important habitat areas from development; and
- F. That roads and utilities serving the proposed development are located and designed so as not to conflict with critical resources, habitat areas or migratory paths.

The applicant's Burden of Proof responses are attached.

OAK TREE PERMIT

Pursuant to Section 22.56.2050 of the County Code, an oak tree report was submitted by Impact Sciences, Inc. Of the 201 oak trees associated with the project and subject to the Oak Tree ordinance as identified in the June 2006 and updated September 2006 report, 82 trees are included in the associated Oak Tree Permit.

Sixty-seven (67) oak trees, including 10 heritage oaks are proposed to be removed as part of onsite and offsite improvements. Fourteen (14) oak trees, including three heritage oaks are proposed to be encroached within its protected zone due to potential impacts from construction.

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Mitigation measures recommended by the County Forester/Fire Warden include replacement of oak tree removals at a rate of 2:1 (and 10:1 for heritage oaks) for a total of 214 mitigation trees. A contribution to the Los Angeles County Oak Forest Special Fund would also be required for any tree that dies within two years as a result of a permitted encroachment. The oak tree report also identified 26 trees which would be candidates for relocation within the Specific Plan boundaries.

Pursuant to Section 22.56.2100 of the County Code, the applicant must meet the following burden of proof:

- A. That the proposed construction of proposed use will be accomplished without endangering the health of the remaining trees subject to this Part 16, if any, on the subject property; and
- B. That the removal or relocation of the oak tree(s) proposed will not result in soil erosion through the diversion or increased flow of surface waters which cannot be satisfactorily mitigated; and
- C. That in addition to the above facts, at least one of the following findings apply:
 - 1. That the removal or relocation of the oak tree(s) proposed is necessary as continued existence at present location(s) frustrates the planned improvement or proposed use of the subject property to such an extent that:
 - a. Alternative development plans cannot achieve the same permitted density or that the cost of such alternative would be prohibitive, or
 - b. Placement of such tree(s) precludes the reasonable and efficient use of such property for a use otherwise authorized; or
 - 2. That the oak tree(s) proposed for removal or relocation interferes with utility services or streets and highways, either within or outside of the subject property, and no reasonable alternative to such interference exists other than removal of the tree(s); or
 - 3. That the condition of the oak tree(s) proposed for removal with reference to seriously debilitating disease or danger of falling is such that it cannot be remedied through reasonable preservation procedures and practices; and
- D. That the removal of the oak tree(s) proposed will not be contrary to or be in substantial conflict with the intent and purpose of the oak tree permit procedure.

The applicant's Burden of Proof responses are attached.

ENVIRONMENTAL DOCUMENTATION

The program-level Specific Plan EIR was certified along with adoption of the Specific Plan and a Statement of Overriding Considerations. The Board found that there were overriding public benefits, and included preservation of nearly 1,000 acres of the Santa Clara River and open areas; over 50 miles of trails including the Santa Clara River Trail; provision of improved parks, library and fire station which were 'above and beyond' mitigations required by CEQA; provision of 2,200 affordable homes; and preservation of the River Corridor to retain Santa Clara River's significant riparian vegetation and habitat. Within the Specific Plan EIR, six alternatives were discussed, and include project designs with reduction in 20, 39, and 68 percent of the development. While the development with 68-percent reduction was identified as the environmentally superior alternative, the Specific Plan was eventually

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adopted by the Board with a revised project and mitigation measures along with certification of the EIR.

In accordance with State and County CEQA guidelines, a project-level Draft EIR, which is tiered from the certified Specific Plan program EIR, was prepared for Landmark Village. The Draft EIR concludes that certain potentially significant impacts are less than significant with implementation of the proposed mitigation measures in the Mitigation Monitoring Program. However, the Draft EIR concludes that the project design and/or suggested conditions will result in certain significant impacts are unavoidable, and cannot be mitigated to less than significant. Copies of the Draft EIR were distributed to the Commission.

Identified potential impacts found to be less than significant with project mitigation, include:

- | | |
|--------------------------------------|---------------------------|
| ▪ Geology and Soils | ▪ Mineral Resources |
| ▪ Hydrology | ▪ Water Resources |
| ▪ Water Quality | ▪ Wastewater Disposal |
| ▪ Floodplain Modification | ▪ Sheriff Services |
| ▪ Traffic/Access | ▪ Fire Protection/Hazards |
| ▪ Environmental Safety | ▪ Education |
| ▪ Cultural/Paleontological Resources | ▪ Libraries |
| ▪ Utilities | ▪ Parks and Recreation |

Identified potentially impacts that cannot be mitigated to less than significant, and will result in significant residual and/or cumulative impacts, include:

- Biota
- Visual Quality
- Noise
- Agricultural Resources
- Solid Waste Disposal

Of these impacts that cannot be mitigated to less than significant, Noise is the only factor that was not previously identified and adopted with a Statement of Overriding Considerations as part of the certified Specific Plan program EIR. Noise impacts result from pile-driving of piers, the construction of the Long Canyon Road bridge, and potential impacts to future residents on Landmark Village if bridge construction begins after the subdivision is built and occupied.

Mitigation measures which have been incorporated into the project, and included in the Mitigation Monitoring Program ("MMP"), are listed in the Executive Summary of the Landmark Draft EIR, and include mitigation measures originally prescribed within the Specific Plan EIR.

Four alternatives to the Landmark project are also discussed in the Draft EIR as required by CEQA guidelines. These include: (1) No Project/No Development Alternative; (2) No Project/Future Development; (3) Floodplain Avoidance; and (4) Cluster Design. Each alternative is evaluated for potential impacts and the environmentally superior alternative is identified.

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Within this Draft EIR, the Cluster Alternative No. 4 (Draft EIR dated November 2006, Pages 5.0-20 through 5.0-35) is identified as the environmentally superior alternative. This alternative retains the overall layout of the proposed Landmark Village, except for 106 acres in the most western portion of the property that is to remain for agricultural uses. This would result in a reduction of 507 dwelling units along with 828,000 square feet of commercial space. This Alternative would retain the elementary school and 16-acre community park, and bank stabilization would still be required along the edge of the Santa Clara River. This project would result in the same factors impacted by development, and would increase the impact to water service and water quality.

The technical appendices include geological and geotechnical reports, an air quality analysis, drainage concept, biota report, sensitive plant report, spadefoot toad habitat monitoring report, water supply analysis, noise report, water quality reports, cultural resources assessment, Santa Clara river fluvial study, an archeological survey, and other technical documents supporting the Draft EIR.

The formal public review period for the Draft EIR was for a period of 60 days, from November 20, 2006 to January 22, 2007. A Notice of Public Review Period Time Continuation was also distributed, which extended the Draft EIR public review period up until January 31, 2007 at this time.

All written comments received prior to the close of the public hearing will be considered in the Final EIR. Copies of written correspondence on the Draft EIR, including requests for additional review time, are attached.

COUNTY DEPARTMENT AND AGENCY COMMENTS AND RECOMMENDATIONS

Subdivision Committee consists of the Departments of Regional Planning, Public Works, Fire, Parks and Recreation, and Public Health. The Subdivision Committee has reviewed the Tentative Tract and Exhibit "A" maps dated November 7, 2005, and recommends the attached conditions.

Comments and recommendations from County Departments and other agencies consulted during the environmental review process include the California Department of Fish and Game ("Fish and Game"), Regional Water Quality Control Board, Native American Heritage Commission, California Highway Patrol ("CHP"), California Department of Transportation ("Caltrans"), Southern California Association of Governments ("SCAG") as well as City of Santa Clarita and County of Ventura. Other agencies that have provided correspondence include the Castaic Lake Water Agency, Sierra Club, California Water Network, Santa Clarita Organization for Planning and the Environment (SCOPE), Piru Neighborhood Council and Friends of the Santa Clara River.

Most comments received indicate that due to the volume of material associated with this EIR, an additional 30 to 60 days is requested as part of the public review period. The EIR was circulated with an original public review period of 60 days, and has been extended once for an additional nine days to coincide with the Commission public hearing date.

Comments were received from Audobon California that state that insufficient bird surveys were done as part of the Draft EIR along with mischaracterizations of the status, range and impacts to bird species, and lack of specific mitigation measures for maximum feasible mitigation. Comments were

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also received from the SCAG indicating that the Draft EIR analysis is consistent with the Regional Comprehensive Plan and Guide (RCPG), as well as from CHP that indicate concerns with increased traffic flow where currently little development exists.

All comments received in response to the Draft EIR are attached and will be incorporated into the Final EIR.

LEGAL NOTIFICATION/COMMUNITY OUTREACH

Approximately five notices of public hearing were mailed to property owners within a 1,000-foot radius of the subject property as well as additional notices to those on the courtesy mailing list for projects in the Newhall and Castaic Canyon Zoned Districts. The public hearing notice was published in The Signal and La Opinion on November 20, 2006. The Draft EIR was available for review at the Newhall Library, Valencia Library and Canyon County Jo Anne Darcy Library beginning November 20, 2006. Project materials, including a tentative tract map, site plan, and recommended conditions, were received at the Newhall Library on December 29, 2006. One large public hearing notice, eight feet wide by four feet high, was posted on the subject property along SR-126 on December 29, 2006. Public hearing materials were also posted on the Department of Regional Planning's website.

The applicant has also presented the project on several occasions to the Castaic Area Town Council. Comments have not yet been received from the Castaic Area Town Council regarding the project.

CORRESPONDENCE RECEIVED BEFORE PUBLIC HEARING

Most correspondence received to date, comment on the Draft EIR and request additional time for review. Some comments have been received, and are discussed in summary detail above. Comments have been received in opposition to this project, with several references to the timing of this project with an Environmental Impact Statement (a federal environmental document) for the Santa Clara River. One letter has also been received in favor of the project, with desire expressed to live within this community once developed.

All correspondence received to date has been attached as part of this package.

STAFF EVALUATION

The Newhall Ranch Specific Plan was adopted by the Board on May 27, 2003 after numerous public hearings before the Commission and Board, and through public participation from many organizations and community groups as well as interested individuals and through changes as a result of litigation. Within its boundary, the Specific Plan itself is the comprehensive document to guide future development, with plans, development regulations, design guidelines and implementation procedures.

An EIR was prepared for the Specific Plan, which indicated that certain impacts could not be mitigated to less than significant, and with adoption of the Specific Plan, the Board also adopted a Statement of

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Overriding Considerations as there were overriding public benefits to approval of the project. These included that the project was designed to preserve over nine square miles, including the Santa Clara River; 'buried bank stabilization' as proposed by the City of Santa Clarita, has been incorporated into the project which is above and beyond the requirements of the County's General and Area Plan; the project uses 'livable community' concepts, including the mixed use category to combine commercial with residential and recreational, provide over 50 miles of pedestrian and bicycle trails, provide bus pull-ins, and a park-and-ride facility is planned; and new Water Reclamation Plant will be constructed.

The Specific Plan is adopted for a total maximum of 21,308 dwelling units as well as approximately 5.5 million square feet of nonresidential uses over 11,963.9 gross acres.

Landmark Village is the first subdivision within the Specific Plan, and proposes a maximum of 1,444 dwelling units and 1,033,000 square feet of nonresidential uses on 292 acres. The property proposes single-family, for sale and lease attached and detached multi-family units, mixed use, office and retail commercial, and open space, including trails, parks and neighborhood recreation areas. An elementary school is also proposed as well as fire station (not yet incorporated into the tentative map).

As an implementation tool of the Specific Plan, a subdivision is submitted and evaluated for compliance with the Title 21 of the County Code (Subdivision Ordinance) as well as the California Map Act. Subdivisions are also evaluated for consistency with the Specific Plan, including density within portions of the property, siting of streets and recreation, and parking as necessary to accommodate multi-family and commercial uses as well as other development standards.

In addition, the Specific Plan contains language for determinations of substantial conformance for changes, either approved, approved with conditions or denied, that based on whether it can be found that the request substantially conforms with all applicable provisions of the Specific Plan and County ordinances; will not adversely affect public health, safety and welfare; and will not adversely affect adjacent property. The project seeks determinations of substantial conformance related to offsite reciprocal parking, street widths, front yard setbacks, and offsite transport of materials with conformance with grading and hillside management criteria.

Adjustments to the land use designations are also permitted within the Specific Plan, including conversion of uses and adjustments of boundaries. The project proposes adjustment of the land use boundaries as well as conversion of Low-Medium Density to Mixed Use, which comply with the parameters for such adjustments and conversions as stated in the Specific Plan.

The project also proposed development with the SEA/SMA, the Santa Clara River, including grading, bank stabilization, haul routes, and Long Canyon Road bridge. Long Canyon Road bridge is one of the bridge crossings originally considered by the Board for the Specific Plan, and was approved as part of the Specific Plan in that location. Haul routes are proposed to use existing river crossings that are permitted by the Army Corps of Engineers for agricultural uses. Grading is proposed as habitat restoration as well as bank stabilization to revegetate with native vegetation. One hundred-foot buffers are required to be provided by the Specific Plan, and may include bank stabilization, water quality basins, trails and other public facility related uses.

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While the EIR concluded that not all impacts from Landmark Village can be mitigated to less than significant, all but one factor was already identified as part of the Specific Plan, and the project was approved with the Statement of Overriding Considerations.

Additional time was requested by many organizations to allow time to further evaluate the project. These included requests for approval timing with an evaluation of an EIS for the Santa Clara River itself.

FEES/DEPOSITS

If approved as recommended by staff, the following shall apply:

California Department of Fish and Game:

1. Processing fee of \$875.00 associated with the filing and posting of a Notice of Determination with the County Clerk, to defray the costs of fish and wildlife protection and management incurred by the California Department of Fish and Game.

Fire Department:

2. Cost recovery deposit of \$5,000.00 to cover a preconstruction meeting, and subsequent monitoring over a five-year period to determine compliance with the Oak Tree Permit.

Department of Regional Planning, Impact Analysis:

3. Deposit of \$3,000.00 to defray the costs of reviewing the subdivider's reports and verifying compliance with the information required by the Mitigation Monitoring Program.

Department of Regional Planning, Zoning Enforcement:

4. Cost recovery deposit of \$1,500.00 to cover the cost of 10 recommended zoning enforcement inspections (recommend two a year for a five-year period). Additional funds would be required if violations are found on the subject property.

STAFF RECOMMENDATION

The following recommendation is subject to change based on oral testimony or documentary evidence submitted during the public hearing process.

Based on the number of requests for additional time, staff recommends that the Commission continue the public hearing to consider all testimony on the project, including the Draft EIR. Staff also recommends that the Commission formally continue the public review period of the EIR to coincide with the continued date.

GENERAL PLAN AMENDMENT CASE NO. 00-196-(5)
LOCAL PLAN AMENDMENT CASE NO. 00-196-(5)
SPECIFIC PLAN AMENDMENT CASE NO. 00-196-(5)
VESTING TENTATIVE TRACT MAP NO. 53108
CONDITIONAL USE PERMIT CASE NO. 00-196-(5)
CONDITIONAL USE PERMIT CASE NO. 2005-01121-(5)
OAK TREE PERMIT CASE NO. 00-196-(5)
Staff Report

Suggested Motion: "I move that the Regional Planning Commission continue the public hearing to allow time for interested parties as they have requested, to continue to allow additional time for review the project and provide comments, and to continue the public comment period for the Draft EIR to coincide with the continued public hearing date of _____, 2007."

Attachments:

Draft Conditions
Conditional Use Permit Burdens of Proof
Oak Tree Permit Burden of Proof
Vesting Tentative Tract Map No. 53108 - reduced size copy
Conditional Use Permit Case Nos. 001-96 and 2005-01121 Exhibit "A" – reduced size copy
Land Use Map
Correspondence
From Applicant: Landmark Planning Notebook, January 2007

SMT:st
01/25/07

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION – SUBDIVISION
TRACT NO. 53108 (Rev.)

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TENTATIVE MAP DATED 11-07-2005
EXHIBIT MAP DATED 11-07-2005

The following reports consisting of 30 pages are the recommendations of Public Works.

The subdivision shall conform to the design standards and policies of Public Works, in particular, but not limited to the following items:

1. Details and notes shown on the tentative map are not necessarily approved. Any details or notes which may be inconsistent with requirements of ordinances, general conditions of approval, or Department policies must be specifically approved in other conditions, or ordinance requirements are modified to those shown on the tentative map upon approval by the Advisory agency.
2. Easements are tentatively required, subject to review by the Director of Public Works to determine the final locations and requirements.
3. Easements shall not be granted or recorded within areas proposed to be granted, dedicated, or offered for dedication for public streets, highways, access rights, building restriction rights, or other easements until after the final map is filed with the Registrar-Recorder/County Clerk's Office. If easements are granted after the date of tentative approval, a subordination must be executed by the easement holder prior to the filing of the final map.
4. In lieu of establishing the final specific locations of structures on each lot/parcel at this time, the owner, at the time of issuance of a grading or building permit, agrees to develop the property in conformance with the County Code and other appropriate ordinances such as the Building Code, Plumbing Code, Grading Ordinance, Highway Permit Ordinance, Mechanical Code, Zoning Ordinance, Undergrounding of Utilities Ordinance, Water Ordinance, Sanitary Sewer and Industrial Waste Ordinance, Electrical Code, and Fire Code. Improvements and other requirements may be imposed pursuant to such codes and ordinances.
5. All easements existing at the time of final map approval must be accounted for on the approved tentative map. This includes the location, owner, purpose, and recording reference for all existing easements. If an easement is blanket or indeterminate in nature, a statement to that effect must be shown on the tentative map in lieu of its location. If all easements have not been accounted for, submit a corrected tentative map to the Department of Regional Planning for approval.

HW

Rev. 12-12-2006

6. Adjust, relocate, and/or eliminate lot lines, lots, streets, easements, grading, geotechnical protective devices, and/or physical improvements to comply with ordinances, policies, and standards in effect at the date the County determined the application to be complete all to the satisfaction of Public Works.
7. Prior to final approval of the tract map submit a notarized affidavit to the Director of Public Works, signed by all owners of record at the time of filing of the map with the Registrar-Recorder/County Clerk's Office, stating that any proposed condominium building has not been constructed or that all buildings have not been occupied or rented and that said building will not be occupied or rented until after the filing of the map with the Registrar-Recorder/County Clerk's Office.
8. Place standard condominium/residential planned development/commercial planned development/Landscape Maintenance District notes on the final map to the satisfaction of Public Works. The formation of the Landscape Maintenance District for all median and parkway landscaping must be approved by the Department of Parks and Recreation.
9. Place standard lease purpose only notes on the final map to the satisfaction of Public Works.
10. Label driveways and multiple access strips as "Private Driveway and Fire Lane" and delineate on the final map to the satisfaction of Public Works.
11. Reserve reciprocal easements for drainage, ingress/egress, utilities, and maintenance purposes, etc., in documents over the private driveways and delineate on the final map to the satisfaction of Public Works.
12. If unit filing occurs, reserve reciprocal ingress and egress easements in documents over the private driveways and delineate on the final map to the satisfaction of Public Works.
13. Furnish Public Works' Street Name Unit with a list of street names acceptable to the subdivider. These names must not be duplicated within a radius of 20 miles.
14. A Mapping & Property Management Division house numbering clearance is required prior to approval of the final map.

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TENTATIVE MAP DATED 11-07-2005
EXHIBIT MAP DATED 11-07-2005

15. Design the boundaries of the unit final maps to the satisfaction of the Departments of Regional Planning and Public Works.
16. The first unit of this subdivision shall be filed as Tract No. 53108-01, the second unit, Tract No. 53108-02, and the last unit, Tract No. 53108.
17. A final tract map must be processed through the Director of Public Works prior to being filed with the Registrar-Recorder/County Clerk's Office.
18. Prior to submitting the tract map to the Director of Public Works for examination pursuant to Section 66442 of the Government Code, obtain clearances from all affected Departments and Divisions, including a clearance from the Subdivision Mapping Section of the Land Development Division of Public Works for the following mapping items; mathematical accuracy; survey analysis; and correctness of certificates, signatures, etc.
19. Quitclaim or relocate easements running through proposed structures.
20. A final guarantee will be required at the time of filing of the final map with the Registrar-Recorder/County Clerk's Office.
21. Show open space note and dedicate residential construction rights over the open space lots.
22. If all possible, modify the boundaries of the open space lots or add additional open space lots to include the airspace easements for sight distance to the satisfaction of the Department of Regional Planning and Public Works.
23. Permission is granted to record large lots (20-acre or more) parcel map as shown on the insert map provided full street right of way and slope easements are dedicated along the latest IEC approved alignments on Route 126 (Henry Mayo Drive) and Long Canyon Road to the satisfaction of the Department of Public Works. In addition, make an offer of private and future right of way and dedicate slope easements along all remaining interior streets on alignments to the satisfaction of Public Works. This permission is contingent on deletion of the secondary highway south of and parallel to SR 126 from the County Highway Plan.

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EXHIBIT MAP DATED 11-07-2005

24. Within 30 days of the approval date of this land use entitlement or at the time of first plan check submittal, the applicant shall deposit the sum of \$2,000 (Minor Land Divisions) or \$5,000 (Major Land Divisions) with Public Works to defray the cost of verifying conditions of approval for the purpose of issuing final map clearances. This deposit will cover the actual cost of reviewing conditions of approval for Conditional Use Permits, Tentative Tract and Parcel Maps, Vesting Tentative Tract and Parcel Maps, Oak Tree Permits, Specific Plans, General Plan Amendments, Zone Changes, CEQA Mitigation Monitoring Programs and Regulatory Permits from State and Federal Agencies (Fish and Game, USF&W, Army Corps, RWQCB, etc.) as they relate to the various plan check activities and improvement plan designs. In addition, this deposit will be used to conduct site field reviews and attend meetings requested by the applicant and/or his agents for the purpose of resolving technical issues on condition compliance as they relate to improvement plan design, engineering studies, highway alignment studies and tract/parcel map boundary, title and easement issues. When 80% of the deposit is expended, the applicant will be required to provide additional funds to restore the initial deposit. Remaining balances in the deposit account will be refunded upon final map recordation.

HW
Prepared by Henry Wong

Phone (626) 458-4915

Date 12-29-2005

tr53108L-rev9.doc



**COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION
SUBDIVISION PLAN CHECKING SECTION
DRAINAGE AND GRADING UNIT**

TRACT NO. 53108

**REV TENTATIVE MAP DATED 11/07/05
EXHIBIT MAP 11/07/05**

DRAINAGE CONDITIONS

1. Provide drainage facilities to remove the flood hazard and dedicate and show necessary easements and/or right of way on the final map. This is required to the satisfaction of the Department of Public Works prior to the filing of the final map.
2. Place a note of flood hazard on the final map and delineate the areas subject to flood hazard. Show and label all natural drainage courses. Dedicate to the County the right to restrict the erection of buildings in the flood hazard area. This is required to the satisfaction of the Department of Public Works prior to the filing of the final map.
3. A hydrology study for design of drainage facilities is required. Hydrology study must be submitted and approved prior to submittal of improvement plans. This is required to the satisfaction of the Department of Public Works prior to the filing of the final map.
4. Provide fee title lot for debris basins/inlets to the satisfaction of the Department of Public Works.
5. A maintenance permit is required from the State Department of Fish and Game, the Corps of Engineers, and the State Water Resources Control Board for debris basins with a minimum capacity of 5,000 cubic yards. This is required to the satisfaction of the Department of Public Works prior to the filing of the final map.
6. Notify the State Department of Fish and Game prior to commencement of work within any natural drainage course. If non-jurisdiction is established by the Department of Fish and Game, submit a letter of non-jurisdiction to Public Works (Land Development Division).
7. Contact the State Water Resources Control Board to determine if a Notice of Intent (NOI) and a Storm Water Pollution Prevention Plan (SWPPP) are required to meet National Pollution Discharge Elimination System (NPDES) construction requirements for this site.
8. Contact the Corps of Engineers to determine if a permit is required for any proposed work within the major watercourse. Provide a copy of the 404 Permit upon processing of the drainage plans. If non-jurisdiction is established by the Corps of Engineers, submit a letter of non-jurisdiction to Public Works (Land Development Division).
9. This site is located in Zone "A" per the Federal Flood Insurance Rate Map. Public Works, Watershed Management Division (626) 458-4322, should be contacted to obtain procedures for revising the flood insurance rate map once the storm drain facilities are constructed. Encroachment into FEMA Zone "A" is not permitted prior to obtaining a Conditional Letter of Map Revision (CLOMR) from FEMA.
10. Comply with the requirements of the Drainage Concept / Standard Urban Stormwater Mitigation Plan (SUSMP) plan which was conceptually approved on 11/29/06 to the satisfaction of Public Works.
11. Prior to recordation of the final map, form an assessment district to finance the future ongoing maintenance and capital replacement of all SUSMP devices/systems. The developer shall cooperate fully with Public Works in the formation of the assessment district. SUSMP devices/systems may include, but are not limited to, catch basin inserts, debris excluders, biotreatment basins, vortex separation type systems, and other devices/systems for stormwater quality.
12. Prior to recordation of the final map, the developer shall deposit the first year's total assessment based on the engineers estimate as approved by Public Works. This will fund the first year's maintenance after the facilities are accepted. The second and subsequent years assessment will be collected through the property tax bill.

13. Portions of the County Adopted Floodway (maps 43-ML23, 43-ML24, 43-ML25, and 43-ML26) must be revised and/or rescinded by the Board of Supervisors prior to recordation of final map. The project will involve placement of earth fill within the existing Santa Clara River and result in relocating the River through the construction of the improvements. The proposed flood control improvements for this project affecting the County Adopted Floodways include (1) soil cement levee-lining for the fill associated with the development, (2) offsite soil cement levee-lining at south bank of the River, (3) WRP Utility Corridor soil cement levee-lining, (4) SR 126 Utility Corridor non-structural bank erosion protection with Turf Reinforced Mats, and (5) Long Canyon Bridge. The improvements within the existing river will result in relocating the floodplain and require revising the existing County Ordinance Floodways.
14. The location of the alternative onsite debris basin as shown on the approved drainage concept is not necessarily approved. The location of the basin shall be determined in the hydrology study to the satisfaction of Public Works. Modification of the existing Caltrans culvert may be required. This may require a lot configuration change, a change in the number of lots, a revised drainage concept, a revised environmental document, and/or a revised tentative map.
15. The overflow of the existing Chiquito Landfill basin for the alternative onsite debris basin is not fully addressed in the approved drainage concept. This issue must be addressed in the hydrology study to the satisfaction of Public Works. This may require a lot configuration change, a change in the number of lots, a revised drainage concept, a revised environmental document, and/or a revised tentative map.
16. The sizing and design of the proposed non-structural SUSMP system is not fully addressed in the approved drainage concept. Centralized water treatment devices or equivalent may be used as an alternative to the proposed non-structural SUSMP. The sizing, design, and final locations of the proposed SUSMP mitigation shall be addressed in the hydrology study to the satisfaction of Public Works. This may require a lot configuration change, a change in the number of lots, a revised drainage concept, a revised environmental document, and/or a revised tentative map.
17. Locations of trails as shown on the approved drainage concept are not approved.
18. Maintenance of the trail/fill over buried bank stabilization is not a responsibility of L.A. County or LACFCD. Prior to recordation of the final map, an agreement memorializing the maintenance responsibilities must be in place to the satisfaction of Public Works.
19. The non-structural utility corridor embankment is not to be maintained by LACFCD. Prior to recordation of the final map, an agreement memorializing the maintenance responsibilities must be in place to the satisfaction of Public Works.
20. Comply with the requirements of "Newhall Ranch Santa Clara River HEC-RAS Modeling Report dated December 2005 (1-5 to Ventura County Line)" and "Newhall Ranch-Santa Clara River Phase 1 Fluvial Study dated March 6, 2006 (final date pending)" approved on 04/18/06 and the approval letter from Land Development Division of LACDPW.
21. Prior to final map recordation, the top and toe elevations for the levee-lining will require further analysis of the Newhall Ranch Development within the tributary drainage areas and the evaluation of the resulting fluvial impacts (if any) to the Santa Clara River as related to changes in tributary sediment delivery pre- versus post-development condition. The final design and permitting for this tract development requiring bank protection will be based upon the final results as concluded in the "HEC-RAS AND PHASE 1 FLUVIAL ANALYSIS" approved on 04/18/06 and the Phase 2 Fluvial Studies under process and yet to be finished.

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GRADING CONDITIONS:

1. A grading plan and soil and geology report must be submitted and approved prior to approval of the final map. The grading plans must show and call out the construction of at least all the drainage devices and details, the paved driveways, the elevation and drainage of all pads, and the SUSMP devices. The applicant is required to show and call out all existing easements on the grading plans and obtain the easement holder approvals prior to the grading plans approval.

Name GARY GUO Date 11/29/06 Phone (626) 458-4921

**County of Los Angeles Department of Public Works
GEOTECHNICAL AND MATERIALS ENGINEERING DIVISION
GEOLOGIC REVIEW SHEET
900 So. Fremont Ave., Alhambra, CA 91803
TEL. (626) 458-4925**

DISTRIBUTION
1 Geologist
1 Soils Engineer
1 GMED File
1 Subdivision

TENTATIVE TRACT MAP 53108
SUBDIVIDER Newhall Land & Farming Co. / Newhall Ranch Co.
ENGINEER Psomas
GEOLOGIST & SOILS ENGINEER Allan Seward

TENTATIVE MAP DATED 11/7/05 (Revision)
LOCATION Newhall Ranch
REPORT DATE 2/10/01, 9/27/00 (00-1702R-4)

[X] TENTATIVE MAP FEASIBILITY IS RECOMMENDED FOR APPROVAL. PRIOR TO FILING THE FINAL LAND DIVISION MAP, THE FOLLOWING CONDITIONS MUST BE FULFILLED:

- ☒ The final map must be approved by the Geotechnical and Materials Engineering Division (GMED) to assure that all geotechnical factors have been properly evaluated.
- ☒ A grading plan must be geotechnically approved by the GMED. This grading plan must be based on a detailed engineering geology report and/or soils engineering report and show all recommendations submitted by them. Reports must address grading shown on sheet 5 of the Tentative Map. It must also agree with the tentative map and conditions as approved by the Planning Commission. If the subdivision is to be recorded prior to the completion and acceptance of grading, corrective geologic bonds will be required.
- ☒ All geologic hazards associated with this proposed development must be eliminated,
or
delineate restricted use areas, approved by the consultant geologist and/or soils engineer, to the satisfaction of the Geology and Soils Sections, and dedicate to the County the right to prohibit the erection of buildings or other structures within the restricted use areas.
- ☐ A statement entitled: "Geotechnical Note(s), Potential Building Site: For grading and corrective work requirements for access and building areas for Lot(s) No(s). _____ refer to the Soils Report(s) by _____, dated _____."
- ☒ The Soils Engineering review dated 12/28/05 is attached.

[] TENTATIVE MAP IS APPROVED FOR FEASIBILITY. THE FOLLOWING INFORMATION IS APPLICABLE TO THIS DIVISION OF LAND:

- ☐ This project may not qualify for a waiver of final map under section 21.48.140 of the Los Angeles County Title 21 Subdivision Code.
- ☐ The subdivider is advised that approval of this division of land is contingent upon the installation and use of a sewer system.
- ☐ Geology and/or soils engineering reports may be required prior to approval of building or grading plans.
- ☐ Groundwater is less than 10 feet from the ground surface on lots _____
- ☐ The Soils Engineering review dated _____ is attached.

Prepared by


Geir R. Mathisen

Reviewed by _____

Date 12/6/05

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
GEOTECHNICAL AND MATERIALS ENGINEERING DIVISION

SOILS ENGINEERING REVIEW SHEET

Address: 900 S. Fremont Ave., Alhambra, CA 91803
Telephone: (626) 458-4925
Fax: (626) 458-4913

District Office 8.2
Job Number LX001129
Sheet 1 of 1

Tentative Tract Map	53108
Location	Newhall Ranch
Developer/Owner	Newhall Land and Farming Company
Engineer/Architect	Psomas
Soils Engineer	Allen E. Seward
Geologist	Same as above

DISTRIBUTION:

☐ Drainage
☐ Grading
☐ Geo/Soils Central File
☐ District Engineer
☐ Geologist
☐ Soils Engineer
☐ Engineer/Architect

Review of:

Revised Tentative Tract Map Dated By Regional Planning 11/7/05

Previous review sheet dated 8/31/05

ACTION:

Tentative Map feasibility is recommended for approval, subject to conditions below:

REMARKS:

At the grading plan stage:

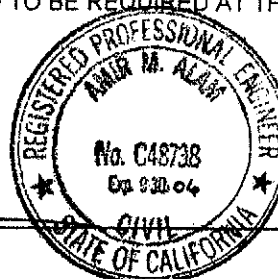
1. Provide geotechnical report addressing all the offsite grading shown on the Tentative Map.
2. Submit two sets of grading plans to the Soils Section for verification of compliance with County codes and policies.

NOTE TO PLAN CHECKER / APPLICANT:

ANY EXTENSIVE REVISIONS TO THE PROPOSED GRADING DETERMINED TO BE REQUIRED AT THE GRADING STAGE FOR THE OFFSITE AREA MAY REQUIRE A REVISED TENTATIVE TRACT MAP.

Reviewed by


Amir M. Alam



Date 12/28/05

NOTICE: Public safety, relative to geotechnical subsurface exploration, shall be provided in accordance with current codes for excavations, inclusive of the Los Angeles County Code, Chapter 11.48, and the State of California, Title 8, Construction Safety Orders.

P:\Amir\53108Tent

The subdivision shall conform to the design standards and policies of Public Works, in particular, but not limited to the following items:

1. A minimum centerline curve length of 100 feet shall be maintained on all local streets. A minimum centerline curve radius of 100 feet shall be maintained on all cul-de-sac streets. Reversing curves of local streets need not exceed a radius of 1,500 feet, and any curve need not exceed a radius of 3,000 feet.
2. The minimum centerline radius is 350 feet on all local streets with 64 feet of right of way and on all the streets where grades exceed 10 percent.
3. Compound curves are preferred over broken-back curves. Broken-back curves must be separated by a minimum of 200 feet of tangent (1,000 feet for multi-lane highways or industrial collectors). If compound curves are used, the radius of the smaller curve shall not be less than two-thirds of the larger curve. The curve length of compound curves shall be adjusted to exceed a minimum curve length of 100 feet, when appropriate.
4. Curves through intersections should be avoided when possible. If unavoidable, the alignment shall be adjusted so that the proposed BC and EC of the curve through the intersection are set back a minimum of 100 feet away from the BCR's of the intersection.
5. Reversing curves and compound curves through intersections should be avoided when possible. If unavoidable, the minimum centerline radius of reversing curves and compound curves through intersections shall comply with design speeds per the Subdivision Plan Checking Section's "Requirements for Street Plans" and sight distances.
6. The minimum centerline radius on a local street with an intersection street on the concave side shall comply with design speeds per the Subdivision Plan Checking Section's "Requirements for Street Plans" and sight distances.
7. The centerline of all local streets shall be aligned without creating jogs of less than 150 feet. A one-foot jog may be used where a street changes width from 60 feet to 58 feet of right of way.
8. Provide minimum landing area of 100 feet for local collectors, 50 feet for local access roads, and 25 feet for cul-de-sacs at a maximum 3 percent grade on all "tee" intersections.

TENTATIVE MAP DATED 11-07-2005

EXHIBIT MAP DATED 11-07-2005

9. The central angles of the right of way radius returns shall not differ by more than 10 degrees on local streets.
10. At tee intersections involving local streets, the maximum permissible grade of the through street across the intersection is 10 percent. For intersections involving multi-lane highways, the maximum permissible grade of the through street is three percent. For 4-legged intersections, the maximum permissible grade of the through street is 8 percent.
11. Provide intersection sight distance for a design speed of:
 - a. 70 mph or to the satisfaction of Public Works and Caltrans on SR-126 (westerly direction) from Long Canyon Road;
 - b. 60 mph (650 feet) on Long Canyon Road from the commercial driveway serving Lot 351/353 (northerly direction) and from the commercial driveway serving Lot 367/368(southerly direction);
 - c. 45 mph (465 feet) on "A" Street from the commercial driveway serving lot 352 (easterly direction, looking towards the center of the through lane on the northerly side of "A" Street east of Long Canyon Road); from the commercial driveway serving lots 367/375 (easterly direction); from the commercial driveway serving lots 374/375 (westerly direction), if a left-turn movement is proposed; from the park driveway serving lot 344 (easterly direction); from the school driveway lot 345 (easterly direction); from "L" Street (westerly direction); from "N" Street (both directions);
 - d. 30 mph (310 feet) on "C" Street from "D" Street (southwesterly direction); on "F" Street from "D" Street (easterly direction); on "J" Street from "K" Street (westerly direction); on "N" Street from the westerly intersection with "Q" Street (easterly direction); on "O" Street from "N" Street (southerly direction); on "O" Street from the easterly intersection with "Q" Street (southwesterly direction); on "Q" Street from the westerly intersection with "N" Street (northerly direction); and on "Q" Street from the easterly intersection with "N" Street (northwesterly direction).

Line of sight shall be within right of way or dedicate airspace easements to the satisfaction of Public Works. Additional grading may be required. With respect to the position of the vehicle at the minor road, the driver of the vehicle is presumed to be located 4 feet right of centerline and 10 feet back the top of curb (TC) or flow line (FL) prolongation. When looking left, we consider the target to be located at the center of the lane nearest to the parkway curb. We use 6 feet from TC as a conservative rule, in the case of pop outs we use 6 feet from TC of the travel lane. When looking right, the target is the center of the lane nearest to the centerline or from the median TC (when present). We use 6 feet from centerline or from the median TC as a conservative rule.

12. Provide standard property line return radii of 13 feet at all local street intersections, including intersection of local streets with planned highways (those on the County Highway Plan), 27 feet where all planned highways intersect or where one of the roads serves a commercial or industrial development, or to the satisfaction of Public Works.
13. Dedicate vehicular access rights on SR-126, unless the Department of Regional Planning requires the construction of a wall. In such cases, complete access rights shall be dedicated.
14. Dedicate right of way to the satisfaction of Public Works and Caltrans a minimum of 70 feet from the latest approved centerline on Henry Mayo Drive (SR-126). The proposed 140-foot typical section of Henry Mayo Drive (SR-126) is conditionally approved. Approval is contingent on the traffic study demonstrating that the projected traffic volumes do not exceed the capacity of this roadway. If so, provide additional right of way for additional lanes, exclusive left-turn lanes, exclusive right-turn lanes, and transition improvements to the satisfaction of Public Works and Caltrans. The cross sections and lane configurations as shown are not necessarily approved and are still subject to review and approval to the satisfaction of Public Works.
15. Make an offer of future right of way and provide slope easements at the future Henry Mayo Drive (SR-126) / Long Canyon Road Interchange and Henry Mayo Drive (SR-126) / Wolcott Road Interchange to the satisfaction of Public Works.
16. Design all affected intersections and driveway entrances along Long Canyon Road and Wolcott Road to be compatible with vertical approaches to the future grade separations at the Henry Mayo Drive (SR-126) interchanges and at the Santa Clara River to the satisfaction of Public Works.

17. The Newhall Ranch Specific Plan also included a secondary highway through this tract (south of and parallel to SR-126). The deletion of this future highway requires the filing of a highway plan amendment through the IEC. For more information, please contact Barry Witler at (626) 458-4351.
18. Dedicate right of way a minimum of 57 feet (no parking, on street bike lane) from the latest approved centerline on Long Canyon Road per P-265(PW) to the satisfaction of Public Works.
 - a. Long Canyon Road within this tract is a major highway added to the County Highway Plan through the adoption of the Newhall Ranch Specific Plan. The applicant shall prepare an alignment for Long Canyon Road and obtain Public Works approval. An exception for a 60 mph design speed for Long Canyon Road within Tract 53108 must be approved by Public Works. For more information, please contact Barry Witler at (626) 458-4351.
 - b. Approval is contingent on the traffic study demonstrating that the projected traffic volumes do not exceed the capacity of this roadway. If so, provide additional right of way for exclusive left-turn lanes, exclusive right-turn lanes, and transition improvements on Long Canyon Road.
 - b. The cross sections and lane configurations as shown are not necessarily approved and are still subject to review and approval to the satisfaction of Public Works.
 - c. Permission is granted to use modified street sections on Long Canyon Road subject to review and approval to the satisfaction of Public Works. The proposed 114-foot typical sections are conditionally approved with a median width of 14 feet and pavement on each side of the raised median at least 42 feet wide between curbs.
 - d. Dedicate additional right of way on Long Canyon Road in the vicinity of the bridge to provide full-width sidewalk with 8 feet of clearance on the bridge."
 - e. Maintain a minimum of 8 feet wide parkway on Long Canyon Road.
 - f. Establish a landscape maintenance district, subject to the approval of the Department of Parks and Recreation, for the purpose of maintaining the landscaped medians and parkways (if applicable) on Long Canyon Road.

19. Dedicate 110 feet of right of way on "A" Street from Long Canyon Road to Wolcott Road for design speed of 45 mph to the satisfaction of Public Works.
 - a. Approval is contingent on the traffic study demonstrating that the projected traffic volumes do not exceed the capacity of this two-lane roadway. If so, provide additional right of way for additional lanes, exclusive left-turn lanes, exclusive right-turn lanes, and transition improvements.
 - b. The cross sections and lane configurations as shown are not necessarily approved and are still subject to review and approval to the satisfaction of Public Works.
 - c. Permission is granted to use modified street sections along "A" Street from Long Canyon Road to Wolcott Road subject to review and approval to the satisfaction of Public Works. The proposed 110-foot typical sections of "A" Street are conditionally approved with a median width of 14 feet and pavement on each side of the raised median at least 30 feet wide between curbs to accommodate one travel lane, a striped bike lane, and a parking lane.
 - d. Maintain a minimum of 12 feet wide parkway on "A" Street.
 - e. The details of the sidewalks, landscaping, and swales in the parkway are not necessarily approved. Establish a landscape maintenance district, subject to the approval of the Department of Parks and Recreation, for the purpose of maintaining the landscaped medians and parkways on "A" Street.
20. Dedicate right of way 53 feet from the centerline on Wolcott Road from Henry Mayo Drive (SR-126) to "A" Street for design speed of 45 mph to the satisfaction of Public Works.
 - a. Approval is contingent on the traffic study demonstrating that the projected traffic volumes do not exceed the capacity of this two-lane roadway. If so, provide additional right of way for exclusive left-turn lanes, exclusive right-turn lanes, and transition improvements.
 - b. The cross sections and lane configurations as shown are not necessarily approved and are still subject to review and approval to the satisfaction of Public Works.

- c. Permission is granted to use modified street sections on Wolcott Road. The proposed 106-foot street section on Wolcott Road is conditionally approved. Design the cross sections for Wolcott Road to provide lane configurations: with a median width of 14 feet and pavement on each side of the raised median at least 26 feet curb to curb (no parking, no bike lane), 32 feet curb to curb (on street parking, no bike lane), or 31 feet curb to curb (no parking, on street bike lane) and parkway width to the satisfaction of Public Works. Provide standard lane configurations based on cross sections for a secondary highway in accordance with Section 21.24.065 of the Subdivision Ordinance proposed cross sections and/or based on the approved traffic study to the satisfaction of Public Works.
 - d. The details of the sidewalks and landscaping in the parkway are not necessarily approved. Establish a landscape maintenance district, subject to the approval of the Department of Parks and Recreation, for the purpose of maintaining the landscaped medians and parkways on Wolcott Road.
- 21. Dedicate additional right of way at all proposed roundabout locations to the satisfaction of Public Works.
 - 22. Dedicate the right to restrict vehicular access on Long Canyon Road, Wolcott Road and "A" Street. All proposed driveway locations, driveway widths, median setbacks, and median openings as shown on the tentative map are not necessarily approved and are still subject to review and approval to the satisfaction of Public Works.
 - 23. Dedicate right of way 42 feet from centerline including a standard cul-de-sac bulb on "Y" Street for a design speed of 45 mph to the satisfaction of Public Works. If required, provide additional right of way at the intersection with Long Canyon Road to the satisfaction of Public Works.
 - 24. Dedicate right of way 32 feet from centerline on "A" Street from Wolcott Road to "D" Street.
 - 25. Dedicate right of way 29 feet from centerline on "A" Street from "D" Street to "C" Street, "B" Street, "C" Street, "D" Street, "E" Street, "F" Street, "G" Street, "H" Street, "I" Street, "J" Street, "K" Street, "L" Street, "M" Street, "N" Street, "O" Street, "Q" Street, and "Z" Street.
 - 26. Permission is granted to use the 58-foot modified local street section with 34 feet in roadway width with parking allowed on both sides of the street.

27. Dedicate additional right of way for standard knuckles and standard cul-de-sac bulbs to the satisfaction of Public Works.
28. Construct curb, gutter, base, pavement, and sidewalk on all streets and highways (except SR-126.) to the satisfaction of Public Works.
29. Construct improvements along the property frontage on Henry Mayo Drive (SR-126) to the satisfaction of Caltrans.
30. Construct additional pavement on Henry Mayo Drive (SR-126) as may be determined necessary to mitigate project impacts to provide exclusive right-turn lanes, left-turn lanes, and transitions at entrance street intersections to the satisfaction of Public Works and Caltrans.
31. Obtain an encroachment permit from Caltrans for all improvements along Henry Mayo Drive (SR-126).
32. Plant street trees on all local streets and highways (except SR-126).
33. Construct the pedestrian bridge over Henry Mayo Drive (SR-126) to the satisfaction of Public Works and Caltrans. The foundation of the pedestrian bridge shall be located outside of the road right of way.
34. Construct a slough wall outside the street right of way when the height of the slope is greater than five feet above the sidewalk and the sidewalk is adjacent to the street right of way. The wall shall not impede any required line of sight.
35. Construct drainage improvements (and parkway drains, if needed) and offer easements needed for street drainage or slopes to the satisfaction of Public Works. Where streets or highways are located within flood hazard areas or subject to inundation, provide adequate freeboard and slope protection to the satisfaction of Public Works. Construct adequate embankment protection along any sections of highways or streets located within flood plain boundaries or subject to inundation. Adequate freeboard shall also be provided.
36. Underground all existing service lines and distribution lines that are less than 50 KV and new utility lines to the satisfaction of Public Works and Southern California Edison. Please contact Construction Division at (626) 458-3129 for new location of any above ground utility structure in the parkway.

37. Install postal delivery receptacles in groups to serve two or more residential lots.
38. Provide and install street name signs prior to occupancy of buildings.
39. Prior to final map approval, enter into an agreement with the County franchised cable TV operator (if an area is served) to permit the installation of cable in a common utility trench to the satisfaction of Public Works, or provide documentation that steps to provide cable TV to the proposed subdivision have been initiated to the satisfaction of Public Works.
40. Comply with the following street lighting requirements:
 - a. Provide street lights on concrete poles with underground wiring within the tract boundaries on all streets and highways including Henry Mayo Drive (SR-126) to the satisfaction of Public Works and Caltrans. Submit street lighting plans as soon as possible for review and approval to the Street Lighting Section of the Traffic and Lighting Division. For additional information, please contact the Street Lighting Section at (626) 300-4726.
 - b. The proposed development, or portions thereof, are not within an existing Lighting District. Annexation and assessment balloting are required. Upon tentative map approval, the applicant shall comply with conditions listed below in order for the Lighting District to pay for the future operation and maintenance of the street lights. The Board of Supervisors must approve the annexation and levy of assessment (should assessment balloting favor levy of assessment) prior to filing of the final subdivision maps for each area with the Registrar-Recorder/County Clerk.
 - (1) Request the Street Lighting Section to commence annexation and levy of assessment proceedings.
 - (2) Provide business/property owner's name(s), mailing address(es), site address, Assessor Parcel Number(s), and Parcel Boundaries in either Microstation or Auto CADD format of territory to be developed to the Street Lighting Section.
 - (3) Submit a map of the proposed development including any roadways conditioned for street lights that are outside the proposed project area to Street Lighting Section. Contact the Street Lighting Section for map requirements and with any questions at (626) 300-4726.

TENTATIVE MAP DATED 11-07-2005
EXHIBIT MAP DATED 11-07-2005

- c. The annexation and assessment balloting process takes approximately ten to twelve months to complete once the above information is received and approved. Therefore, untimely compliance with the above will result in a delay in receiving approval of the street lighting plans or in filing the final subdivision map for recordation. Information on the annexation and the assessment balloting process can be obtained by contacting Street Lighting Section at (626) 300-4726.
 - d. For acceptance of street light transfer of billing, the area must be annexed into the Lighting District and all street lights in the development, or the current phase of the development, must be constructed according to Public Works approved plans. The contractor shall submit one complete set of "as-built" plans. Provided the above conditions are met, all street lights in the development, or the current phase of the development, have been energized, and the developer has requested a transfer of billing at least by January 1 of the previous year, the Lighting District can assume responsibility for the operation and maintenance of the street lights by July 1 of any given year. The transfer of billing could be delayed one or more years if the above conditions are not met.
- 41. Prepare detailed 1" = 40' scaled signing and striping plans for Henry Mayo Drive (SR-126), Long Canyon Road, Wolcott Road, "Y" Street, and "A" Street within or abutting this subdivision to the satisfaction of Public Works and Caltrans.
 - 42. Prepare detailed 1" = 40' scaled signing and striping plans for all off-site intersections affected by this subdivision as indicated in the attached letter dated December 9, 2004 from our Traffic and Lighting Division to the satisfaction of Public Works and Caltrans.
 - 43. As indicated in the attached letter dated December 9, 2004 from our Traffic and Lighting Division, install traffic signals (both on-site and off-site) for all signalized intersections and prepare 1" = 20' scaled traffic signal plans to the satisfaction of Public Works. If required, provide additional right of way to the satisfaction of Public Works.
 - 44. Comply with the mitigation measures (including off-site improvements) identified in the attached December 9, 2004 letter from our Traffic and Lighting Division to the satisfaction of Public Works. It shall be the sole responsibility of the subdivider to acquire the necessary off-site right of way and/or easements.

45. If needed, the location of the driveway to Lot 352 and the southerly driveway to Lot 354 on "Y" Street shall be relocated to reflect the conceptual plan to the satisfaction of Public Works.
46. Setback the raised median nose a minimum of 20 feet from the right of way within private driveway and fire lanes on all lots to the satisfaction of Public Works.
47. Setback the raised median noses a minimum of 20 feet on all streets to the satisfaction of Public Works.
48. Provide adequate spacing (minimum of 50 feet) on the northerly driveway to Lot 354 between the right of way and the first curb opening to the parking area for buildings A and B (shown on Exhibit Map Sheet 7 of 12) to the satisfaction of Public Works.
49. Permission is granted to record large lots (20 acre or more) parcel map as shown on the insert map provided full street right of way and slope easements are dedicated along the latest approved alignments on Henry Mayo Drive (SR-126) and Long Canyon Road to the satisfaction of Public Works. In addition, make an offer of private and future right of way and dedicate slope easements along all remaining interior streets (including Wolcott Road) on alignments to the satisfaction of Public Works. This permission is contingent on deletion of the secondary highway south of and parallel to SR-126 from the County Highway Plan.
50. Permission is granted to use modified street cross-sections as shown on the tentative map to the satisfaction of Public Works. However, the subdivider may elect to construct standard and/or alternate street cross section to the satisfaction of Public Works. If alternate street cross sections are proposed, construct additional sidewalk pop-out along the property frontage on all applicable streets in the vicinity of any above ground utilities to meet current ADA requirements to the satisfaction of Public Works.
51. All site plans shall be reviewed and approved by Public Works prior to final approval.

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION - ROAD
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TENTATIVE MAP DATED 11-07-2005
EXHIBIT MAP DATED 11-07-2005

52. Additional comments/requirements:

- The street profiles along Long Canyon Road and Wolcott Road showing the vertical approach to the proposed interchanges, the at-grade intersections at SR-126 (Henry Mayo Drive), and at the Santa Clara River (Long Canyon Road only) as shown on the tentative map are not necessarily approved. The design and construction on Long Canyon Road and Wolcott Road must be compatible with the ultimate improvements on SR-126 and the Santa Clara River (Long Canyon Road only) to the satisfaction of Public Works.

HW
Prepared by Timothy Chen
tr53108r-rev9.doc

Phone (626) 458-4915

Date 12-29-2005



COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
www.ladpw.org

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: T-4

December 9, 2004

Mr. Daryl Zerfass
Austin-Foust Associates, Inc.
2020 North Tustin Avenue
Santa Ana, CA 92705-7827

Dear Mr. Zerfass:

**RIVER VILLAGE
TENTATIVE TRACT NO. 53108
TRAFFIC IMPACT ANALYSIS (SEPTEMBER 28, 2004)
CASTAIC JUNCTION AREA**

As requested, we have reviewed the above-mentioned document. The project is located in the unincorporated County of Los Angeles area of Castaic Junction. The project site is bounded by State Route (SR) 126 to the north, the Santa Clarita River to the south, and the Castaic Creek to the east.

The proposed project, River Village, is the first phase of the Newhall Ranch Specific Plan (NRSP). The NRSP has been approved for approximately 21,000 residential dwelling units. River Village consists of the development of 591 single-family detached dwelling units, 398 condominium units and 455 apartments units for a total of 1,444 residential dwelling units; a 750 student elementary school; a 20.9-acre public park; and 1,040,000 square feet of commercial uses. The project is estimated to generate approximately 41,880 vehicle trips daily, with 2,910 and 4,160 vehicle trips during the a.m. and p.m. peak hours, respectively. The document addresses the project in three development phases: 2007 for Phase I, 2008 for Phase II, and 2010 for Phase III. Phase I consists of 500 residential units. Phase II consists of the remaining residential units, the elementary school, 100,000 feet of commercial uses, and the public park. Phase III consists of the balance of the commercial uses for 940,000 square feet.

FILE COPY

Mr. Darly Zerfass
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We have received a separate technical report for the proposed west and east roundabouts for the intersections of Driveway – Tentative Tract No. 53018, Lots 373 and 374; and Wolcott Road; both at "A" Street – Tentative Tract No. 53108, respectively. We will provide additional comment on the roundabouts, as we complete our review of the submitted report.

We generally agree with the traffic impact analysis and require the following traffic impact mitigation measures with the project approval. The traffic impact analysis shall be revised to be consistent with mitigation measures contained in this letter.

- The main access for River Village will be provided from SR-126 via the existing intersections of Wolcott Way and Chiquito Canyon Road. Future phases of the NRSP will provide access to and from south via Long Canyon Road. Unless an updated long range study is prepared which demonstrates that the intersections will adequately handle the area buildout traffic as at grade intersections, adequate road right of way shall be reserved for future grade separated interchanges at these two locations, as approved in the NRSP.
- The study is based on the Santa Clarita Valley Consolidated Traffic Model and assumes the following roadway improvements will be in place with Phase I of the project. In accordance with our Traffic Impact Analysis Report Guidelines (TIARG), these improvements shall be made a condition of approval for the project to be in place prior to issuance of any building permit(s) for Phase I of the project.
 - Reconstruct the Golden State (I-5) Freeway/SR-126 Freeway interchange by adding access to eastbound SR-126 from southbound I-5, access to southbound I-5 from westbound SR-126, direct access to northbound I-5 from westbound SR-126, and widening bridge to 8 lanes.
 - Construct Newhall Ranch Road segment between Vanderbilt Way and Copper Hill Drive/Rye Canyon Road.
- The traffic signals shall be installed at the following intersections. The design and the construction of the traffic signals shall be the sole responsibility of the project. The signals shall be in place at their ultimate design locations prior to the issuance of any building permit(s) for the indicated phase of the project to the satisfaction of Public Works.

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Phase I: Wolcott Way at Henry Mayo Drive (SR-126)

Phase II: Chiquito Canyon Road and Long Canyon Road (Future) at Henry Mayo Drive (SR-126)

Phase III: Long Canyon Road at "Y" Street and "A" Street (TT 53108)

- The traffic generated by the project alone will significantly impact the following intersections. The following improvements shall be the sole responsibility of the project and be a condition of approval to be in place prior to the issuance of any building permit(s) for the indicated phase. Detailed striping and signal modification plans must be submitted for review and approval.

PHASE I

Wolcott Way at Henry Mayo Drive (SR-126)

North approach: One left-turn lane, one through lane, and an exclusive right-turn lane (convert shared left-turn/through lane to through lane).

South approach (future): One left-turn lane, one through lane, and an exclusive right-turn lane (add one left-turn lane, convert shared left-turn/through/right-turn lane to through lane and add an exclusive right-turn lane).

Design and install traffic signals to the satisfaction of Public Works.

School Middle Driveway/"S" Street at "A" Street (TT 53108)

The projects shall be responsible for the preparation of traffic signal design plans and securing adequate funds with Public Works for the full construction of the signals. The intersection will be monitored for the installation of the signals once the school is fully occupied with 750 students.

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Chiquito Canyon Road and Long Canyon Road (Future) at Henry Mayo Drive (SR-126)

North approach: One left-turn lane and one shared through/right-turn lane (convert shared left-turn/through lane to left-turn lane and exclusive right-turn lane to shared through/right-turn lane).

East approach: One left-turn lane, two through lanes, and an exclusive right-turn lane (add one left-turn lane and convert shared left-turn/through lane to through lane).

South approach (future): One left-turn lane, one through lane, and an exclusive right-turn lane (add one left-turn lane, convert shared left-turn/through/right-turn lane to through lane and add an exclusive right-turn lane).

PHASE II

Wolcott Way at Henry Mayo Drive (SR-126)

East approach: Two left-turn lanes, two through lanes, and an exclusive right-turn lane (add second left-turn lane, convert shared through/right-turn lane to through lane and add an exclusive right-turn lane).

South approach (future): One left-turn lane, one through lane, and two exclusive right-turn lanes (add second exclusive right-turn lane from Phase I).

West approach: One left-turn lane, two through lanes, and an exclusive right-turn lane (convert through/right-turn to through lane and add an exclusive right-turn lane).

Modify traffic signals to the satisfaction of Public Works.

PHASE III

Golden State (I-5) Freeway Southbound Ramps at Henry Mayo Drive (SR-26)

East approach: Three through lanes and a free right-turn lane (add third through lane).

Modify traffic signals to the satisfaction of Public Works.

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Wolcott Way at Henry Mayo Drive (SR-126)

West approach: One left-turn lane, three through lanes, and an exclusive right-turn lane (add third through lane).

Modify traffic signals to the satisfaction of Public Works.

Chiquito Canyon Road and Long Canyon Road (Future) at Henry Mayo Drive (SR-126)

North approach: One left-turn lane, one through lane, and an exclusive right-turn lane (convert shared through/right-turn lane to through lane and add an exclusive right-turn lane).

East approach: Two left-turn lanes, two through lanes, and an exclusive right-turn lane (add second left-turn lane).

South approach (future): One left-turn lane, two through lanes, and two exclusive right-turn lanes (add second through lane and second exclusive right-turn lane).

Modify traffic signals to the satisfaction of Public Works.

- The cumulative traffic generated by the project and other related projects will significantly impact the following intersections. The project shall contribute its proportionate share of the cost for the following mitigation measures. Detailed striping and/or signal modification plans must be prepared to determine the feasibility of the recommended mitigation measures and cost estimate of each mitigation measure.

Golden State (I-5) Freeway Southbound Ramps at Henry Mayo Drive (SR-126)

North approach: Two left-turn lanes, one shared left-turn/through lane, and an exclusive right-turn lane (add one shared left/right-turn lane).

East approach: Four through lanes and one free right-turn lane (add fourth through lane).

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West approach: Four through lanes and one free right-turn lane (add third and fourth through lanes).

Modify traffic signals to the satisfaction of Public Works.

The project's total pro-rata share is 38.3 percent. The project may elect to pay by phase as each phase gets recorded: Phase I = 8.3 percent, Phase II = 8.1 percent and Phase III = 21.9 percent.

Golden State (I-5) Freeway Northbound Ramps at Henry Mayo Drive (SR-126)

East approach: Three through lanes and one free right-turn lane (add third through lane).

South approach: Three left-turn lanes and an exclusive right-turn lane (add third left-turn lane).

West approach: Four through lanes and one free right-turn lane (add third and fourth through lanes).

Modify traffic signals to the satisfaction of Public Works.

The project's total pro-rata share is 20.8 percent. The project may elect to pay by phase as each phase gets recorded: Phase I = 4.7 percent, Phase II = 4.0 percent, and Phase III = 12.1 percent.

Wolcott Way at Henry Mayo Drive (SR-126)

North approach: Two left-turn lanes, one through lane, and an exclusive right-turn lane (add second left-turn lane).

East approach: Two left-turn lanes, three through lanes, and an exclusive right-turn lane (add third through lane).

West approach: Two left-turn lanes, three through lanes, and an exclusive right-turn lane (add second left-turn lane).

Modify traffic signals to the satisfaction of Public Works.

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The project's total pro-rata share is 62.1 percent. The project may elect to pay by phase as each phase gets recorded: Phase I = 12.2 percent, Phase II = 19.3 percent, and Phase III = 30.6 percent.

Commerce Center Drive at Henry Mayo Drive (SR-126) Interchange

Pay the project's total pro-rata share for the construction of interchange of 33.8 percent. The project may elect to pay by phase as each phase gets recorded: Phase I = 6.6 percent, Phase II = 9.1 percent, and Phase III = 18.1 percent.


- The developer shall coordinate with and notify the Castaic Union School District (CUSD) that traffic circulation plan and the drop-off/pick-up procedures shall be prepared and submitted to Traffic and Lighting Division for review and approval. We recommend a mechanism for enforcement and levying of noncompliance penalties be included in the plan. The CUSD shall prepare informational packets containing the approved drop-off/pick-up procedures and provide to the parents/guardians of students of the school. The recordation of the phase containing Lot 345 where the school is proposed shall be withheld until the student drop-off/pick-up procedures, the informational packets or brochures, and the revised school site plan have been received and approved by Public Works.
- A determination shall be made regarding whether the project has a significant impact on the adjacent I-5 Freeway. Caltrans shall be consulted to obtain their written concurrence with the California Environmental Quality Act level of significance determination. These written comments from Caltrans shall be submitted to Public Works for review and approval.

If you have any questions regarding the traffic analysis and mitigation measures, please contact Mr. Suen Fei Lau of our Land Development Review Section at (626) 300-4820; for questions regarding striping and signing plans, please contact Mr. Sam Richards of our Land Development Review Section at (626) 300-4842; for questions regarding parking restrictions and drop-off/pick-up procedures/program/plan, please contact Ms. Guita Sheik of our Traffic Investigation Section at (626) 300-4712.

Mr. Daryl Zerfass
December 9, 2004
Page 8

Very truly yours,

DONALD L. WOLFE
Interim Director of Public Works


WILLIAM J. WINTER
Assistant Deputy Director
Traffic and Lighting Division

see on
SFL:cn
.EIR04297.doc

- cc: Castaic Union School District (Beverly W. Silsbee)
Department of Regional Planning (Daryl Koutuik)
- bc: Building and Safety
Land Development (Wittler)
Traffic and Lighting (Richards, Sheik)

The subdivision shall conform to the design standards and policies of Public Works, in particular, but not limited to the following items:

1. The subdivider shall install and dedicate main line sewers and serve each building/lot with a separate house lateral or have approved and bonded sewer plans on file with Public Works.
2. The outlet for the proposed sewer system for any unit map must be accepted for public use prior to recordation, otherwise the unit map in question must have approved and bonded sewer plans for the outlet system extending downstream to public sewer on file with Public Works.
3. The tentative map must conform with the approved master sewer area study PC 11812as (currently in plancheck with Public Works). If the system appurtenances and maintenance responsibilities shown on the tentative map do not match those detailed in the approved study, a revised map is required to the satisfaction of Public Works.
4. Prior to recordation of the first unit map a new sanitation district must be formed to operate and maintain all regional sewer facilities associated with this project including but not limited to pump stations, forcemain and gravity trunk lines, and treatments plants. The subdivider shall provide the initial funding for the setup and operation of this district to the satisfaction of Public Works.
5. Prior to recordation of the first unit map the subdivider shall install and dedicate required regional sewer infrastructure or have approved and bonded sewer plans on file with the Newhall Ranch Sanitation District to the satisfaction of Public Works.
6. Prior to recordation of the first unit map the subdivider shall acquire all regulatory permits necessary for the construction of both local and regional sewer facilities.
7. The subdivider shall submit an area study to Public Works to determine if capacity is available in the proposed sewerage system servicing this land division. The approved sewer area study shall remain valid for two years after initial approval of the tentative map. After this period of time, an update of the area study shall be submitted by the applicant if determined to be warranted by Public Works.
8. If the proposed sewer system shown on the tentative map is found to have insufficient capacity, upgrade the proposed sewerage system (both on and off-site) to the satisfaction of Public Works.

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION – SEWER
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TENTATIVE MAP DATED 11-07-2005

9. Construct regional sewer pump stations to the satisfaction of the Newhall Ranch Sanitation District.
10. Easements are required, subject to review by Public Works to determine the final locations and requirements.
11. Provide any necessary off-site easements to construct the off-site sewer improvements to the satisfaction of the Newhall Ranch Sanitation District. It shall be the sole responsibility of the subdivider to acquire the necessary easements.

HW
Prepared by Nathan Howells
tr53108s-rev9(rev'd 06-19-06).doc

Phone (626) 458-4921

Date Rev. 06-19-2006

The subdivision shall conform to the design standards and policies of Public Works, in particular, but not limited to the following items:

1. A "Written Verification" and supporting documents from the water supplier to indicate the availability of a "Sufficient Water Supply" as required per Section 66473.7 of the Subdivision Map Act (SB 221) shall be provided to the satisfaction of the Department of Regional Planning and Public Works prior to filing any map.
2. A water system maintained by the water purveyor, with appurtenant facilities to serve all buildings/lots in the land division, must be provided. The system shall include fire hydrants of the type and location (both on-site and off-site) as determined by the Fire Department. The water mains shall be sized to accommodate the total domestic and fire flows.
3. There shall be filed with Public Works a statement from the water purveyor indicating that the water system will be operated by the purveyor, and that under normal conditions, the system will meet the requirements for the land division, and that water service will be provided to each building/lot.
4. Easements shall be granted to the County, appropriate agency or entity for the purpose of ingress, egress, construction and maintenance of all infrastructures constructed for this land division to the satisfaction of Public Works.
5. Submit landscape and irrigation plans for each open space in the land division, with landscape area greater than 2,500 square feet, in accordance with the Water Efficient Landscape Ordinance.
6. Depict all line of sight easements on the landscaping and grading plans.



COUNTY OF LOS ANGELES
FIRE DEPARTMENT

5823 Rickenbacker Road
Commerce, California 90040

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S. TAE

* to be up'd *

WATER SYSTEM REQUIREMENTS - UNINCORPORATED

Subdivision No. 53108 Tentative Map Date 7-November-05, Ex. A

Revised Report yes

- ☐ The County Forester and Fire Warden is prohibited from setting requirements for water mains, fire hydrants and fire flows as a condition of approval for this division of land as presently zoned and/or submitted. However, water requirements may be necessary at the time of building permit issuance.
- ☒ The required fire flow for public fire hydrants at this location is 5000 gallons per minute at 20 psi for a duration of 5 hours, over and above maximum daily domestic demand. 3 Hydrant(s) flowing simultaneously may be used to achieve the required fire flow.
- ☐ The required fire flow for private on-site hydrants is gallons per minute at 20 psi. Each private on-site hydrant must be capable of flowing gallons per minute at 20 psi with two hydrants flowing simultaneously, one of which must be the furthest from the public water source.
- ☒ Fire hydrant requirements are as follows:
- Install 91 public fire hydrant(s). Upgrade / Verify existing public fire hydrant(s).
- Install private on-site fire hydrant(s).
- ☒ All hydrants shall measure 6"x 4"x 2-1/2" brass or bronze, conforming to current AWWA standard C503 or approved equal. All on-site hydrants shall be installed a minimum of 25' feet from a structure or protected by a two (2) hour rated firewall.
- ☒ Location: As per map on file with the office.
- ☐ Other location:
- ☒ All required fire hydrants shall be installed, tested and accepted or bonded for prior to Final Map approval. Vehicular access shall be provided and maintained serviceable throughout construction.
- ☐ The County of Los Angeles Fire Department is not setting requirements for water mains, fire hydrants and fire flows as a condition of approval for this division of land as presently zoned and/or submitted.
- ☐ Additional water system requirements will be required when this land is further subdivided and/or during the building permit process.
- ☐ Hydrants and fire flows are adequate to meet current Fire Department requirements.
- ☐ Upgrade not necessary, if existing hydrant(s) meet(s) fire flow requirements. Submit original water availability form to our office.

Comments: Detached condo's. The required fire flow for, public fire hydrants at this location is 1500 gallons per minute at 20 psi for a duration of 2 hours, over and above maximum daily domestic demand. 2 Hydrant(s) flowing simultaneously may be used to achieve the required fire flow.

Single family dwellings. The required fire flow for public fire hydrants at this location is 1250 gallons per minute at 20 psi for a duration of 2 hours, over and above maximum daily domestic demand. 1 Hydrant(s) flowing simultaneously may be used to achieve the required fire flow.

All hydrants shall be installed in conformance with Title 20, County of Los Angeles Government Code and County of Los Angeles Fire Code, or appropriate city regulations. This shall include minimum six-inch diameter mains. Arrangements to meet these requirements must be made with the water purveyor serving the area.

Inspector Janna Masi Date 21-Mar-06



COUNTY OF LOS ANGELES

FIRE DEPARTMENT

5823 Rickenbacker Road
Commerce, California 90040

CONDITIONS OF APPROVAL FOR SUBDIVISION - UNINCORPORATED

Subdivision: 53108 Map Date 7-November-05, Ex. A

C.U.P. 00-196 Vicinity Salt Canyon

- ☒ **FIRE DEPARTMENT HOLD** on the tentative map shall remain until verification from the Los Angeles County Fire Dept. Planning Section is received, stating adequacy of service. Contact (323) 881-2404.
- ☒ Access shall comply with Title 21 (County of Los Angeles Subdivision Code) and Section 902 of the Fire Code, which requires all weather access. All weather access may require paving.
- ☒ Fire Department access shall be extended to within 150 feet distance of any exterior portion of all structures.
- ☒ Where driveways extend further than 150 feet and are of single access design, turnarounds suitable for fire protection equipment use shall be provided and shown on the final map. Turnarounds shall be designed, constructed and maintained to insure their integrity for Fire Department use. Where topography dictates, turnarounds shall be provided for driveways that extend over 150 feet in length.
- ☒ The private driveways shall be indicated on the final map as "Private Driveway and Firelane" with the widths clearly depicted. Driveways shall be maintained in accordance with the Fire Code.
- ☒ Vehicular access must be provided and maintained serviceable throughout construction to all required fire hydrants. All required fire hydrants shall be installed, tested and accepted prior to construction.
- ☒ This property is located within the area described by the Fire Department as "Very High Fire Hazard Severity Zone" (formerly Fire Zone 4). A "Fuel Modification Plan" shall be submitted and approved prior to final map clearance. (Contact: Fuel Modification Unit, Fire Station #32, 605 North Angeleno Avenue, Azusa, CA 91702-2904, Phone (626) 969-5205 for details).
- ☒ Provide Fire Department or City approved street signs and building access numbers prior to occupancy.
- ☐ Additional fire protection systems shall be installed in lieu of suitable access and/or fire protection water.
- ☐ The final concept map, which has been submitted to this department for review, has fulfilled the conditions of approval recommended by this department for access only.
- ☐ These conditions must be secured by a C.U.P. and/or Covenant and Agreement approved by the County of Los Angeles Fire Department prior to final map clearance.
- ☐ The Fire Department has no additional requirements for this division of land.

Comments: See additional comment sheets.

By Inspector: Jenna Masi Date 21-Mar-06

Land Development Unit – Fire Prevention Division – (323) 890-4243, Fax (323) 890-9783



**COUNTY OF LOS ANGELES
FIRE DEPARTMENT**

5823 Rickenbacker Road
Commerce, California 90040

LAND DEVELOPMENT UNIT REQUIREMENTS

ADDITIONAL PAGE

SUBDIVISION NO. **53108**

PAGE NO. **1**

- 1 Tentative map page 1
A. A second means of vehicular access shall be provided to Highway 126 prior to the building permit issuance of the 150 unit.
- 2 Exhibit "A", All structures shall be places such that, vehicular access is provided to within 150' of all exterior walls. Said access shall be verified during further design review and / or architectural plan review for building permit clearance.
- 3 Exhibit "A", sheet 4
A. The retail / commercial associated with the Village Green access shall not exceed a maximum height of 35', as measured to the top of the roof structure.
- 4 Exhibit "A", sheet 9. The School and Park sites access shall be further reviewed for compliance at which time the final design plans are submitted for building permit clearances or C.U.P. review.

By Inspector: Janna Masi

Date: 21-Mar-06



COUNTY OF LOS ANGELES
DEPARTMENT OF PARKS AND RECREATION
"Creating Community Through People, Parks and Programs"

Russ Guiney, Director

December 28, 2005

Mr. Paul McCarthy
Supervising Regional Planner
Land Divisions/Research
Department of Regional Planning
320 West Temple Street, Room 1346
Los Angeles, California 90012

Dear Mr. McCarthy:

**RIVER VILLAGE - VESTING TENTATIVE TRACT MAP (VTTM) 53108
CONDITIONS OF MAP APPROVAL
Regional Planning Map dated November 7, 2005
December 29, 2005 Subdivision Committee Meeting**

The Department's Conditions of Map Approval are listed below for the 1,444-residential unit River Village subdivision ("the project").

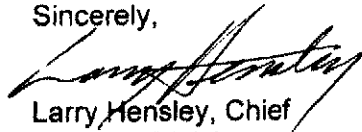
1. The basic Quimby park land obligation is **11.34** net acres of park land. This obligation will be fulfilled by the Developer conveying fee title to Lot 344 to the County as an improved "public park" (9.74-acre community park) in accordance with the conceptual plan and cost estimate enclosed in Developer's February 23, 2004, submittal to the Department; a 6.39-acre private park in Lot 337; recreational centers in lots 330 (0.82 net acres), 336 (3.44 net acres), and 340 (0.97 net acres), and a 3.10 net acre trail easement. If a shared recreational use arrangement for the public park is sought by Castaic School District (District), the recreational improvements on the shared use area (either park property or school district property) shall be visible from 'A' Street (River Village Drive) and the parking lot perpendicular to 'A' Street for the Department to approve the shared use area.
2. Developer may elect to receive Quimby credit for *Specific Plan* park improvements to the public park by giving the Department written notification thirty (30) days prior to Developer's Notice of Construction Commencement for the public park, in which case Developer shall pay prevailing wage to construct the park improvements and submit quarterly statements of costs for the Department's review and approval following the same submittal schedule specified for submitting building permit reports.
3. Developer shall receive a **24.46** Quimby land credit for the net acreage provided for the public park and private parks/recreational areas, and other recreational acreage permitted by the *Specific Plan* as shown in attached Specific Plan Table 5.4-2 ("Park and Recreation Improvement Summary") and sub-table for Local Park Acres Provided (Column D) prepared for Tract 53108. No Quimby credit will be given for improvements to private parks/recreational areas.

4. A carry forward of the 13.12-acre surplus Quimby credit from River Village to any other approved subdivision within the Newhall Ranch *Specific Plan* Area shall not result in a reimbursement to developer from County's Quimby funds or a return by County to developer of any public park land previously conveyed to County for developer's Newhall Ranch *Specific Plan* Area Quimby obligation.
5. Developer shall complete construction of the public park and convey it to the County by the time building permits are obtained for two-thirds of the residential units within the River Village subdivision (i.e., when 963 residential units are permitted). Developer shall submit quarterly reports to the Department that identify for each unit map within River Village the number of residential units for which building permits were issued for the quarter and cumulative to date, and which relate the number of residential units to owner, building number, building type (e.g., single family home, condominium, apartment) and lot number. The quarterly reports are due on the first County business day of January, April, July, and October of each year building permits are issued for River Village. This reporting requirement applies for the actual number and type of dwelling units constructed and for the duration of build out permitted by the approved tentative map. Failure to provide the Department with a report will result in the Department requesting the Department of Public Works to withhold further issuance of building permits for River Village until the respective report is received.
6. Prior to the Department clearing the final map for River Village, Developer shall enter into a Multiple Agreement and post Faithful Performance and Labor & Materials bonds with the Department for Developer's *Specific Plan* park improvements in accordance with updated cost estimates for said improvements.
7. Prior to County accepting title to the public park, a Landscape Lighting and Assessment District (LLAD) shall be created for the mutual benefit of Developer and the County to maintain and operate the park. When LLAD maintenance areas are planned on private, fee simple lots, LLAD easements must be recorded prior to clearance of final (unit) maps by the Department.
8. Developer is responsible for developing the public park in accordance with the *Specific Plan* park improvement plans approved by the Department, at no cost to the County, using standard construction activities and responsible contractors licensed by the State of California to perform this type of work. Sole responsibility for completion of the park improvements, and payment of all costs incurred, lies with Developer.
9. Developer shall obtain, coordinate and pay for all studies, permits, fees and agency inspections required to design and build the park and shall provide one (1) copy of all studies, permits, inspection reports, and written approvals to the Department's representative. Design and construction of the parks shall comply with all applicable federal, state, and local laws, rules, and regulations.
10. Developer shall provide County with certification that all public park playgrounds within River Village meet American Society for Testing and Materials (ASTM) and United States Consumer Product Safety Commission (USCPSC) standards.

11. Developer (or developer's design consultant) shall submit to the Department, public park plans and specifications for review and approval during the design development stage, fifty percent (50%), ninety percent (90%), and one hundred percent (100%) stages of completion of construction documents and, concurrent with the final grading plan submittal to the Department of Public Works, a grading plan (scale: 1 inch = 40 feet or as required by the Department) and specifications, including all grading, drainage, irrigation and planting improvements, utility locations and sizes required under County ordinances. The respective stage of each submittal shall be clearly labeled on the drawings. Plan submittals shall be made by giving the Department three (3) sets of drawings and a CD-ROM containing the drawings in AutoCad 2000 format. The Department shall have twenty-one (21) County business days from receipt of any construction document submittal to review and approve it; if the Department does not respond within said time period, the submittal shall be deemed approved by the Department. Any corrections or changes made by County during review of one stage shall be incorporated into a revision of the current drawings and specifications and resubmitted for County's approval of said stage prior to permission by County for Developer to proceed with the next stage.
12. Developer shall provide the Department with written Notice of Construction Commencement for the park site. The Construction Phase is defined as the period of time from said notice to the date the Department issues its Notice of Acceptance of Completed Park Improvements, inclusive of the 90-day plant establishment period.
13. Developer shall designate and identify a construction manager who will oversee construction of the public park. Developer's construction manager shall communicate by providing written documentation via facsimile or mail to County's representative and abide by County's requirements and direction to ensure acceptable park completion. The construction manager shall provide County with reasonable access to the public park sites and the park improvements for inspection purposes and at a minimum, shall initiate and coordinate the following inspections and approvals during the course of construction with not less than two County business days advanced notice of any request for inspection or approval: (1) contractor orientation/pre-construction meeting; (2) construction staking and layout; (3) progress/installation inspections to be scheduled on a weekly basis or as required to insure conformance with construction documents; (4) any and all required permit inspections; (5) irrigation mainline and equipment layout; (6) irrigation pressure test; (7) irrigation coverage test; (8) weed abatement after abatement cycle, to review degree of kill; (9) plant material approval; (10) plant material/Hydroseed/pre-maintenance inspection; (11) substantial completion and commencement of maintenance period; (12) final walk through and acceptance. Continued work without inspection and approval shall make Developer and its subcontractors solely responsible for any and all expenses incurred for required changes or modifications. County reserves the right to reject all work not approved in conformance with this condition.
14. During the construction period, the construction manager shall maintain a critical path method (CPM) schedule that shall be updated on a biweekly basis and available to the County for review.

15. Upon completing public park construction, Developer shall notify the Department in writing by submitting a Notice of Completion of Park Construction. Within thirty (30) days after receipt of said notice, County shall inspect the park and reasonably determine whether or not the park improvements have been constructed in accordance with the construction documents, and to a level of quality and workmanship for the Department to issue its Notice of Acceptance of Completed Park Improvements. If park construction is unacceptable, within fifteen (15) County business days after inspection, County shall provide Developer with a list of items that need to be corrected, after receipt of said list, in order for Department to issue its Notice of Acceptance of Completed Park Improvements, or issuance of said notice will be delayed until the items on the list are corrected.
16. Developer shall provide Department with two (2) sets of record drawings, maintenance manuals, and irrigation controller charts upon Department's Notice of Acceptance of Completed Park Improvements. These documents shall also be submitted on CD-ROM with the drawings in AutoCad 2000 format.
17. Developer shall convey the public park by recordable grant deed showing the fee vested with the County of Los Angeles, and free of all encumbrances except those that do not interfere with the use of the property for park or recreational purposes. Developer's designated title company shall provide the County with an ALTA title policy and shall record the park deed simultaneously to County's execution of a Certificate of Acceptance, and shall deliver the recorded deed to the Chief Administrative Office Real Estate Division, Property Management Section, 222 South Hill Street, Third Floor, Los Angeles, CA 90012.
18. Any major change proposed by the Developer to the public park location, shape, or size (not more than 2 acres variance) from the approved tentative tract or parcel map, shall be deemed a revision of the tentative tract or parcel map and shall require the filing of an amended or a revised map, as described in subsection B of Section 21.62.030 of the Los Angeles County Code.

Sincerely,



Larry Hensley, Chief
Planning Division

LH:JB (Newhall Ranch; 53108 River Village_12.28.05 rpd)

Attachments (2)

c: Keith Herren, Newhall Land
Carlos Brea, CAO Real Estate Division
Parks and Recreation (Gil Lopez, Larry Hensley, Kathleen Ritner, Les Seidman)



LOS ANGELES COUNTY
DEPARTMENT OF PARKS AND RECREATION
PARK OBLIGATION REPORT



Tentative Map # 53108 DRP Map Date: 11/07/2005 SCM Date: / / Report Date: 12/29/2005
Park Planning Area # 35A NEWHALL / VALENCIA Map Type: REV. (REV RECD)

Total Units **1,444** = Proposed Units **1,444** + Exempt Units **0**

Sections 21.24.340, 21.24.350, 21.28.120, 21.28.130, and 21.28.140, the County of Los Angeles Code, Title 21, Subdivision Ordinance provide that the County will determine whether the development's park obligation is to be met by:

- 1) the dedication of land for public or private park purpose or,
- 2) the payment of in-lieu fees or,
- 3) the provision of amenities or any combination of the above.

The specific determination of how the park obligation will be satisfied will be based on the conditions of approval by the advisory agency as recommended by the Department of Parks and Recreation.

Park land obligation in acres or in-lieu fees:

ACRES:	11.34
IN-LIEU FEES:	\$2,977,215

Conditions of the map approval:

See attached December 29, 2005 letter to Paul McCarthy, Supervising Regional Planner, Land Division Research, Department of Regional Planning for Conditions of Tentative Map Approval.

The park obligation for this development will be met by:

The dedication of 9.74 acres for public park purposes.
Provide 14.72 acres for private park purposes.

Trails:

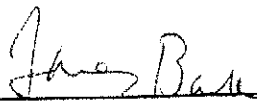
See also attached Trail Report. CASTAIC CREEK AND SANTA CLARA RIVER TRAILS.

See Conditions of the map approval above.

Contact Patrocenia T. Sobrepeña, Departmental Facilities Planner I, Department of Parks and Recreation, 510 South Vermont Avenue, Los Angeles, California, 90020 at (213) 351-5120 for further information or an appointment to make an in-lieu fee payment.

For information on Hiking and Equestrian Trail requirements contact Trail Coordinator at (213) 351-5135.

By:


James Barber, Advanced Planning Section Head

Supv D 5th
December 27, 2005 14:23:19
QMB02F.FRX



**LOS ANGELES COUNTY
DEPARTMENT OF PARKS AND RECREATION**



PARK OBLIGATION WORKSHEET

Tentative Map #	53108	DRP Map Date: 11/07/2005	SMC Date: / /	Report Date: 12/29/2005
Park Planning Area #	35A	NEWHALL / VALENCIA		Map Type: REV. (REV RECD)

The formula for calculating the acreage obligation and or In-lieu fee is as follows:

$$(P) \text{ people} \times (0.003) \text{ Goal} \times (U) \text{ nits} = (X) \text{ acres obligation}$$

$$(X) \text{ acres obligation} \times \text{RLV/Acre} = \text{In-Lieu Base Fee}$$

Where: P = Estimate of number of People per dwelling unit according to the type of dwelling unit as determined by the 2000 U.S. Census*. Assume * people for detached single-family residences; Assume * people for attached single-family (townhouse) residences, two-family residences, and apartment houses containing fewer than five dwelling units; Assume * people for apartment houses containing five or more dwelling units; Assume * people for mobile homes.

Goal = The subdivision ordinance allows for the goal of 3.0 acres of park land for each 1,000 people generated by the development. This goal is calculated as "0.0030" in the formula.

U = Total approved number of Dwelling Units.

X = Local park space obligation expressed in terms of acres.

RLV/Acre = Representative Land Value per Acre by Park Planning Area.

Total Units 1,444 = Proposed Units 1,444 + Exempt Units 0

	People*	Goal 3.0 Acres / 1000 People	Number of Units	Acres Obligation
Detached S.F. Units	3.23	0.0030	590	5.72
M.F. < 5 Units	2.29	0.0030	403	2.77
M.F. >= 5 Units	2.11	0.0030	451	2.85
Mobile Units	1.74	0.0030	0	0.00
Exempt Units			0	
Total Acres Obligation =				11.34

Park Planning Area = 35A NEWHALL / VALENCIA

Goal	Acres Obligation	RLV / Acre	In-Lieu Base Fee
@(0.0030)	11.34	\$262,541	\$2,977,215

Lot #	Provided Space	Provided Acres	Credit (%)	Acres Credit	Land
	Trails	3.10	100.00%	3.10	Private
330	Private Rec. Center	0.82	100.00%	0.82	Private
336	Private Rec. Center	3.44	100.00%	3.44	Private
337	Private Park	6.39	100.00%	6.39	Private
340	Private Rec. Center	0.97	100.00%	0.97	Private
344	Park Area	9.74	100.00%	9.74	Public
Total Provided Acres Credit:				24.46	

Acres Obligation	Public Land Crdt.	Priv. Land Crdt.	Net Obligation	RLV / Acre	In-Lieu Fee Due
11.34	9.74	14.72	(13.12)	\$262,541	(\$3,444,538)

DEVELOPMENT PLAN
2.8 RECREATION AND OPEN AREA

TABLE 2.8-1

PRELIMINARY PARK PROGRAM
Newhall Ranch Specific Plan

ESTIMATED QUIMBY REQUIREMENTS

Description/Category	Units		Avg. Household Size		Assessment Factor		Obligation in Acres
Detached	9,305	x	3.17	x	0.003	=	88
Attached	11,580	x	2.38	x	0.003	=	83
Second Units	423	x	2	x	0.003	=	3
Total:	21,308						174

ESTIMATED QUIMBY CREDITS

Description/Category	Land		Improvements				Total Acreage
	Acres	Credit %	Quimby Acres	Imp Cost \$/SF	Improv. Costs	Acre Equiv.	
Parks:							
Neighborhood Parks ⁽¹⁾	50	100%	50	2.50	5,445,000	45	95
Community Parks ⁽¹⁾							
Active Area	58	100%	58	2.50	6,316,200	52	110
Passive Area	123	50%	62				62
Lake ⁽¹⁾	15	100%	15				15
Subtotal, Parks^{(1),(2)}	246		185		11,761,200	97	282
Trails:							
Regional River Trail	16	100%	16				16
Community Trails	39	100%	39	2.50	4,247,100	35	74
Local Trails (in Open Area)	13	(acreage included below)		1.00	566,280	5	5
Unimproved Trails (in High Country)	13	(acreage included below)		1.00	561,792	5	5
Subtotal, Trails	81		55		5,375,172	45	100
Major Open Areas:							
Golf Course	180	0%	0			0	0
High Country SMA ⁽³⁾	4,185	50%	2,093			0	2,093
River Corridor SMA ⁽³⁾	975	10%	98			0	98
Community Open Area ⁽³⁾ (Excl. Oak Valley Community Park)	869	10%	87			0	87
Subtotal, Major Open Areas	6,209		2,278			0	2,278
TOTAL CREDIT PROVIDED							2,650
Quimby Requirements							174
Excess							2,486

⁽¹⁾ County ordinance allows credit for improvements, land or a combination of both.

⁽²⁾ Parks such as private recreation centers (including improvements) within neighborhoods are also eligible for credit but cannot be quantified at this level of planning.

⁽³⁾ Credit for the River Corridor SMA and Open Area is calculated using a worst-case factor of 10%, which is lowest percent specified in the County ordinance. The County ordinance provides for a greater level of credit pending on slope ranging from a low of 10% to a high of 100%. In order to receive credit for land which has slope greater than 3%, the Director of Parks and Recreation must find that special circumstances exist that would make the acceptance of such land in the public interest. The Director may also give more credit than specified in the ordinance if it is found that a site contains exceptional visual, biotic or other natural resources. Such a case is the High Country SMA, which is exceptionally rich in both natural resources and recreational opportunities, and has been calculated at 50% credit.

**TABLE 5.4-2
PARK AND RECREATION IMPROVEMENTS SUMMARY**

RIVERWOOD	DEDICATION REQUIREMENTS			LOCAL PARK IMPROVEMENTS			Surplus (Deficit) (F - C)
	A Total Units	B Population Factor	C Local Park Requirement (A x B x .003)	D Local Park Acres Provided	E Local Park Improvements (\$)	F Total Acres Provided D+(E/126,000)	
1. Tract No. 53108 (River Village)							
A. Single-Family Detached Residences	590	3.23	5.72				N/A
B. Single-Family Attached Residences and Multi-Family with less than 5 Units/Building	403	2.29	2.77				N/A
C. Multi-Family with 5 or more Units/Building	451	2.11	2.85				N/A
Tract No. 53108 Total	1,444		11.34	24.46	\$0.00	24.46	13.12
VILLAGE TOTAL	1,444		11.34	24.46	\$ 0.00	24.46	13.12

TRACT NO. 53108 (RIVER VILLAGE) COLUMNS "D" AND "E" DETAIL

Lot No.	Unit Map	Phase No.	Category	Local Park Acres	Percent Credit	Local Park Acres Provided	Local Park Improvements (\$)
337			Private Park	6.39	100%	6.39	
344			Community Park	9.74	100%	9.74	
336			River Recreational Area	3.44	100%	3.44	
340, 330			Private Recreational Area	1.79	100%	1.79	
			West Recreation Center	0.97		0.97	
			East Recreation Center	0.82		0.82	
310-317, 392-402			River Trail	3.10	100%	3.10	
TOTAL				24.46		24.46	\$0.00



COUNTY OF LOS ANGELES
DEPARTMENT OF HEALTH SERVICES
Public Health

THOMAS L. GARTHWAITE, M.D.
DIRECTOR and CHIEF MEDICAL OFFICER

FRED LEAF
CHIEF OPERATING OFFICER

JONATHAN E. FIELDING, M.D., M.P.H.
Director of Public Health and Health Officer

Environmental Health
ARTURO AGUIRRE, Director

Bureau of Environmental Protection
Mountain & Rural/Water, Sewage & Subdivision Program
5050 Commerce Drive, Baldwin Park, CA 91706-1423
TEL (626)430-5380 · FAX (626)813-3016
www.lapublichealth.org/eh/progs/envirp.htm



BOARD OF SUPERVISORS

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Fourth District

Michael D. Antonovich
Fifth District

December 28, 2005

RFS No. 05-0031528

Tract Map No: 53108

Vicinity: Del Valle

Tentative Tract Map Date: November 7, 2005 (9th Revision)

The Los Angeles County Department of Health Services' conditions of approval for **Vesting Tentative Tract Map 53108** are unchanged by the submission of the revised map. The following conditions still apply and are in force:

1. Potable water will be supplied by the **Valencia Water Company**, a public water system, which guarantees water connection and service to all lots.
2. Sewage disposal will be provided through the public sewer and wastewater treatment facilities of the **Newhall Ranch Water Treatment Plant** as proposed.

If you have any questions or need additional information, please contact me at (626) 430-5380.

Respectfully,

Becky Valenti, E.H.S. IV
Mountain and Rural/Water, Sewage, and Subdivision Program



COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 890-4330

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN

RECEIVED
DEC 07 2006

December 4, 2006

Daniel Fierros, Regional Planning Assistant
Los Angeles County Department of Regional Planning
Impact Analysis Section
320 West Temple Street
Los Angeles, CA 90012

Dear Mr. Fierros:

OAK TREE PERMIT #00-196, LANDMARK VILLAGE (RIVER VILLAGE) PROJECT, TM #53108

We have reviewed the "Request for Oak Tree Permit #00-196. The project is located south of State Route 126 near the intersection of Chiquito Canyon Rd., north of the Santa Clara River and west of Interstate 5. The Oak Tree Report is accurate and complete as to the location, size, condition and species of the Oak trees on site. The term "Oak Tree Report" refers to the document on file by Impact Sciences the consulting arborist, dated June, 2006.

We recommend the following as conditions of approval:

OAK TREE PERMIT REQUIREMENTS:

1. This grant shall not be effective until the permittee and the owner of the property involved (if other than the permittee), have filed at the office of the Department of Regional Planning their affidavit stating that they are aware of and agree to accept all conditions of this grant.

Unless otherwise apparent from the context, the term "permittee" shall include the applicant and any other person, corporation or other entity making use of this grant.

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

AGOURA HILLS
ARTESIA
AZUSA
BALDWIN PARK
BELL
BELL GARDENS
BELLFLOWER

BRADBURY
CALABASAS
CARSON
CERRITOS
CLAREMONT
COMMERCE
COVINA

CUDAHY
DIAMOND BAR
DUARTE
EL MONTE
GARDENA
GLENORA
HAWAIIAN GARDENS

HAWTHORNE
HIDDEN HILLS
HUNTINGTON PARK
INDUSTRY
INGLEWOOD
IRVINDALE
LA CANADA FLINTRIDGE
LA HABRA

LA MIRADA
LA PUENTE
LAKEWOOD
LANCASTER
LAWNDALE
LOMITA
LYNWOOD

MALIBU
MAYWOOD
NORWALK
PALMDALE
PALOS VERDES ESTATES
PARAMOUNT
PICO RIVERA

POMONA
RANCHO PALOS VERDES
ROLLING HILLS
ROLLING HILLS ESTATES
ROSEMEAD
SAN DIMAS
SANTA CLARITA

SIGNAL HILL
SOUTH EL MONTE
SOUTH GATE
TEMPLE CITY
WALNUT
WEST HOLLYWOOD
WESTLAKE VILLAGE
WHITTIER

2. The permittee shall, prior to commencement of the use authorized by this grant, deposit with the County of Los Angeles Fire Department a sum of \$5000. Such fees shall be used to compensate the County Forester to cover expenses incurred while inspecting the project to determine the permittee's compliance with the conditions of approval.

The above fees provide for one (1) pre-construction meeting required to determine fencing placement in order to secure the protected zone of all remaining Oak trees, inspection of temporary fencing prior to the commencement of any construction and a subsequent five (5) year monitoring period requiring inspections until the conditions of approval have been met.

The Director of Regional Planning and the County Forester shall retain the right to make regular and unannounced site inspections.

3. Before commencing work authorized or required by this grant, the consulting arborist shall submit a letter to the Director of Regional Planning and the County of Los Angeles Fire Department, Forestry Division stating that he or she has been retained by the permittee to perform or supervise the work, and that he or she agrees to report to the Director of Regional Planning and the County Forester any failure to fully comply with the conditions of the grant.

The arborist shall submit at the end of each year an annual monitoring report. The report shall include a diagram showing the exact number and locations of all mitigation trees planted and describe their health, planting dates, any mortality and mitigation timeframe relating to permit compliance.

4. The permittee shall arrange for the consulting arborist or a similarly qualified person to maintain all remaining Oak trees on the subject property that are within the zone of impact as determined by the County Forester for the life of the Oak Tree Permit or the Conditional Use Permit.
5. The permittee shall install temporary chain-link fencing, not less than four (4) feet in height, to secure the protected zone of all remaining Oak trees on site to be determined prior to any grading. The fencing shall be determined and installed prior to grading or tree removal, and shall not be removed without approval of the County Forester. The term "protected zone" refers to the area extending five (5) feet beyond the dripline of the Oak tree (before pruning), or fifteen (15) feet from the trunk, whichever is greater.

6. Copies of the Oak Tree Report, Oak tree map, mitigation planting plan and conditions of approval shall be kept on the project site and available for review. All individuals associated with the project as it relates to the Oak resource shall be familiar with the Oak Tree Report, Oak tree map, mitigation planting plan and conditions of approval.

PERMITTED OAK TREE REMOVAL AND ENCROACHMENT:

7. This grant allows the removal of a total of sixty-seven (67) Oak trees. Sixty-three (63) trees are of the Oak genus (*Quercus agrifolia*) numbered : 8, 9, 10, 51, 60, 61, 63, 64, **83***, 84, 248, 249, 250, 335, 336, 337, **338***, 339, 340, 341, 342, 343, **344***, 345, 346, 347, 348, **349***, 350, 351, **352***, 354, 355, 356, **357***, 396, 397, 398, 400, 401, **492***, 594, 1588, 1589, 1590, 1592, 1594, 1596, 1598, 3073, **4003***, 4016, 4017, 4018, 4019, 4022, 4025, 4026, 4027, 4028, 4055, 4056, 4057. Four (4) trees are of the of the genus (*Quercus lobata*) numbered **87***, 1587, **1597***, and 1591 on the applicants site plan and Oak tree report. A total of ten (10) of these trees to be removed are identified as **Heritage*** (in bold with an asterisk*), having a diameter greater than 36 inches.

This grant allows encroachment within the protected zone of fourteen (14) trees of the Oak genus identified as Tree Numbers: 92, 93, 98, 99, 100, 439, 448, **488***, **489***, 498, **503***, 592, 1605, 4007 on the applicant's site plan map and Oak Tree Report. Three (3) of these trees are identified as **Heritage***. Trenching, excavation, or clearance of vegetation within the protected zone of an Oak tree shall be accomplished by the use of hand tools or small hand-held power tools. Any major roots encountered shall be conserved to the extent possible and treated as recommended by the consulting arborist.

8. In addition to the work expressly allowed by this permit, remedial pruning intended to ensure the continued health of a protected Oak tree or to improve its appearance or structure may be performed. Such pruning shall include the removal of deadwood and stubs and medium pruning of branches two (2) inches in diameter or less in accordance with the guidelines published by the National Arborist Association. Copies of these guidelines are available from the County of Los Angeles Fire Department, Forestry Division. In no case shall more than 20% of the tree canopy of any one (1) tree be removed.
9. Except as otherwise expressly authorized by this grant, the remaining Oak trees shall be maintained in accordance with the principles set forth in the publication, "Oak Trees: Care and Maintenance", prepared by the County of Los Angeles Fire Department, Forestry Division. A copy of the publication is enclosed with these conditions.

MITIGATION TREES:

10. The permittee shall provide mitigation trees of the Oak genus at a rate of two to one (2:1) trees for each tree removed and at a rate of ten to one (10:1) for each Heritage tree removed for a total of 214 mitigation trees.
11. Each mitigation tree shall be at least a 15-gallon specimen in size and measure one (1) inch or more in diameter one (1) foot above the base. Free form trees with multiple stems are permissible; the combined diameter of the two (2) largest stems of such trees shall measure a minimum of one (1) inch in diameter one (1) foot above the base.
12. Mitigation trees shall be at a ratio consistent with the species of Oaks removed for a total of one hundred ninety (190) Quercus agrifolia and twenty four (24) Quercus lobata of indigenous varieties grown from a local seed source.
13. Mitigation trees shall be planted within one (1) year of the permitted Oak tree removals. Additional mitigation trees shall be planted within one (1) year of the death of any tree, which results from its permitted encroachment. Mitigation trees shall be planted either on site or at an off-site location approved by the County Forester. Alternatively, a contribution to the County of Los Angeles Oak Forest Special Fund may be made in the amount equivalent to the Oak resource loss. The contribution shall be calculated by the consulting arborist and approved by the County Forester according to the most current edition of the International Society of Arboriculture's "Guide for Plant Appraisal."
14. The permittee shall properly maintain each mitigation tree and shall replace any tree failing to survive due to a lack of proper care and maintenance with a tree meeting the specifications set forth above. The five-year maintenance period will begin upon receipt of a letter from the permittee or consulting arborist to the Director of Regional Planning and the County Forester indicating that the mitigation trees have been planted. The maintenance period of the trees failing to survive five (5) years will start anew with the new replacement trees. Subsequently, additional monitoring fees shall be required.
15. All mitigation Oak trees planted as a condition of this permit shall be protected in perpetuity by the Los Angeles County Oak Tree Ordinance once they have survived the required maintenance period.

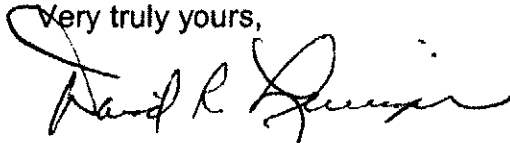
NON-PERMITTED ACTIONS AND VIOLATIONS:

16. Encroachment within the protected zone of any additional tree of the Oak genus on the project site is prohibited.
17. Should encroachment within the protected zone of any additional tree of the Oak genus on the project site not permitted by this grant result in its injury or death within two (2) years, the permittee shall be required to make a contribution to the Los Angeles County Oak Forest Special Fund in the amount equivalent to the Oak resource damage/loss. Said contribution shall be calculated by the consulting arborist and approved by the County Forester according to the most current edition of the International Society of Arboriculture's "Guide for Plant Appraisal."
18. No planting or irrigation system shall be installed within the dripline of any Oak tree that will be retained.
19. Utility trenches shall not be routed within the protected zone of an Oak tree unless the serving utility requires such locations.
20. Equipment, materials and vehicles shall not be stored, parked, or operated within the protected zone of any Oak tree. No temporary structures shall be placed within the protected zone of any Oak tree.
21. Violations of the conditions of this grant shall result in immediate work stoppage or in a notice of correction depending on the nature of the violation. A time frame within which deficiencies must be corrected will be indicated on the notice of correction.
22. Should any future inspection disclose that the subject property is being used in violation of any one of the conditions of this grant, the permittee shall be held financially responsible and shall reimburse the County of Los Angeles Fire Department, Forestry Division for all enforcement efforts necessary to bring the subject property into compliance.

Mr. Daniel Fierros
December 4, 2006
Page 6

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

A handwritten signature in black ink, appearing to read "David R. Leininger". The signature is fluid and cursive, with a large initial "D" and "L".

DAVID R. LEININGER, CHIEF, FORESTRY DIVISION
PREVENTION BUREAU

DRL:es

Enclosure



OAK TREES: Care and Maintenance

This Oak Tree Care and Maintenance Guide offers basic information and practical guidelines aimed at the preservation and continued health and survival of oak trees in the residential landscape.

Increasing pressure for development is changing the oak woodland of Los Angeles County. Heritage oaks which once survived in open rolling hills are now being preserved or replanted and incorporated into the community.

How do we protect these trees during the planning and development process, and ensure their survival once they are in the home garden?

The Oak Tree

Oak Trees in the residential landscape often suffer decline and early death due to conditions that are easily preventable. Damage can often take years to become evident, and by the time the trees show obvious signs of disease it is usually too late to help.

Improper watering, especially during the hot summer months, and disturbance to critical root areas are most often the causes. This booklet will provide guidelines on where these critical areas lie and ways to avoid disturbing them, as well as information on long-term care and maintenance of both natural and planted oaks. Lists of additional resources for more information and demonstration areas to visit are also included.

The Oak Tree Ordinance

The Los Angeles County Oak Tree Ordinance has been established to recognize oak trees as significant historical, aesthetic, and ecological resources. The goal of the ordinance is to create favorable conditions for the preservation and propagation of this unique and threatened plant heritage. By making this part of the development process, healthy oak trees will be preserved and maintained.

The Los Angeles County Oak Tree Ordinance applies to all unincorporated areas of the County. Individual cities may have their own ordinances, and their requirements may be different.

Permit Requirements:

Under the Los Angeles County Ordinance, a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone (see text) of any ordinance sized tree of the oak tree genus without first obtaining a permit.

Damage includes but is not limited to:

- Burning
- Application of toxic substances
- Pruning or cutting
- Trenching
- Excavating
- Paving
- Operation of machinery or equipment
- Changing the natural grade

Chapter 22.56.2050: Oak Tree Permit Regulations, Los Angeles County, Adopted: August 20, 1982. Amended: September 13, 1988.

For more information about the County Oak Tree Ordinance, visit the Forestry Division's website at:

http://lacofd.org/Forestry_folder/otordin.htm

Or contact:

Department of Regional Planning
320 W. Temple Street, 13th floor
Los Angeles, CA 90012-3284
(213) 974-6411
TDD: (213) 617-2292
<http://planning.co.la.ca.us>

Types of oaks commonly found in Los Angeles County:

Many kinds of oak trees are native to Los Angeles County. A few of the more common ones are shown below, but *all* oak trees are covered by the Oak Tree Ordinance.

Older oaks which have thrived under the natural rainfall patterns of dry summers and wet winters often can't handle the extra water of a garden setting. These trees must be treated with special care if they are to survive.

Those oaks that have been planted into the landscape or sprouted naturally tend to be more tolerant of watered landscapes. These vigorous young trees may grow 1½ to 4 feet a year in height under good conditions. Once established these trees would benefit from the same special care outlined in this guide.



Valley Oak
QUERCUS LOBATA

LARGE DECIDUOUS TREE 60'-75' HIGH, BROADLY SPREADING 50'-80' WIDE.

LEAVES: DEEP GREEN, 5"-4" LONG: PAPER-LIKE TEXTURE WITH DEEP ROUNDED LOBES ON THE LEAF EDGE.

TENDS TO FAVOR VALLEY BOTTOMS: FOR THIS REASON THE VALLEY OAK HAS DISAPPEARED FROM THE LANDSCAPE MORE RAPIDLY, IMPACTED SEVERELY BY AGRICULTURE AND URBAN DEVELOPMENT.



Coast Live Oak
QUERCUS AGRIPOLOIA

LARGE EVERGREEN TREE WITH A BROAD, ROUND SHAPE AND LARGE LIMBS. 30'-70' HIGH, 35'-80' WIDE.

LEAVES: GLOSSY GREEN, 1"-5" LONG: SPINY, ROUNDED, AND HOLLY-LIKE BUT DISTINCTLY CUPPED OR CURLED UNDER AT THE EDGES.



Interior Live Oak
QUERCUS WIGLIZENII

EVERGREEN TREE 30'-75' HIGH OR A SHRUB 8'-10' HIGH IN CHAPARRAL AREAS. HAS A FULL, DENSE ROUNDED SHAPE, NOT BROAD WITH LARGE LIMBS LIKE A COAST LIVE OAK. THEY TEND TO GROW IN CLUMPS RATHER THAN AS A SINGLE TREE.

LEAVES: DARK GREEN, 1"-4" LONG. EDGES EITHER SMOOTH OR SPINY, BUT ALWAYS FLAT— NOT CURLED UNDER.

OTHER COMMON OAKS:

CALIFORNIA BLACK OAK: *QUERCUS KELLOGGII*
CANYON LIVE OAK: *QUERCUS CHRYSOLEPIIS*
ENGELMANN OAK: *QUERCUS ENGELMANNII*

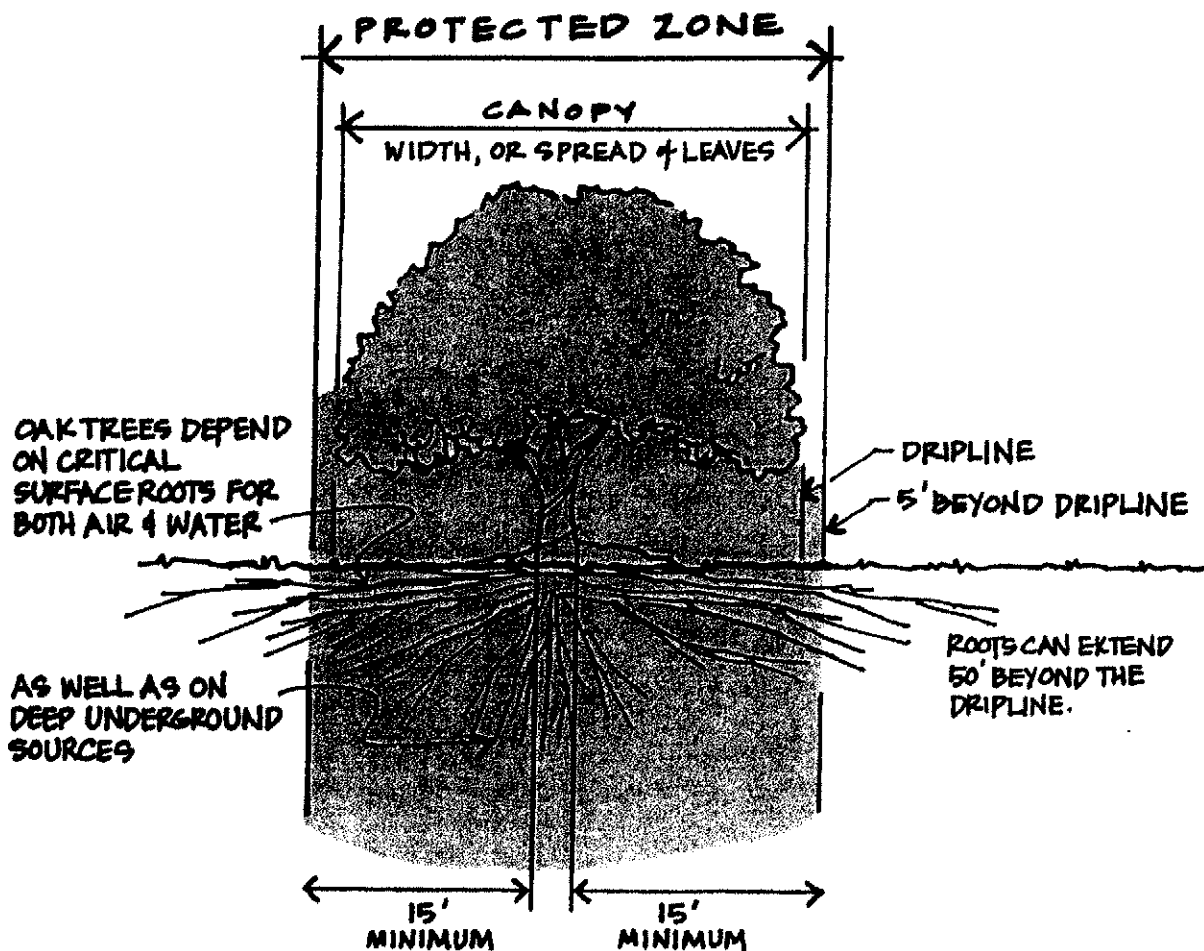
THE PROTECTED ZONE

The *protected zone* defines the area most critical to the health and continued survival of an oak tree. Oaks are easily damaged and very sensitive to disturbances that occur to the tree or in the surrounding environment.

The root system is extensive but surprisingly shallow, sometimes radiating out as much as 50 feet beyond the spread of the tree leaves, or canopy. The ground area at the outside edge of the canopy, referred to as the *dripline*, is especially important: the tree obtains most of its surface water and nutrients here, and conducts an important exchange of air and other gases.

The protected zone is defined in the Oak Tree Ordinance as follows:

"The Protected Zone shall mean that area within the dripline of an oak tree and extending there from to a point at least 5 feet outside the dripline or 15 feet from the trunk, whichever distance is greater."



CONSTRUCTION ACTIVITY WITHIN THE PROTECTED ZONE

Changes in Grade

Any change in the level of soil around an oak tree can have a negative impact. The most critical area lies within 6' to 10' of the trunk: no soil should be added or scraped away. Water should drain away from this area and not be allowed to pond so that soil remains wet at the base.

Retaining walls designed to hold back soil above or below an existing tree should be avoided if at all possible, especially within the protected zone. These types of structures cause critical areas at the dripline to be buried, or require that major roots be severed. Water trapped at the base of the tree could lead to root rot or other impacts, and to the decline and premature death of a highly valued landscape tree.

Construction activities outside the protected zone can have damaging impacts on existing trees. Underground water sources can be cut off due to falling water tables, or drainage may be disrupted.

Trenching

Digging of trenches in the root zone should be avoided. Roots may be cut or severely damaged, and the tree can be killed.

If trenches must be placed within the protected zone, utilities can be placed in a conduit, which has been bored through the soil, reducing damage to the roots. Insist that as many utilities as allowed be placed in a single trench, instead of the common practice of digging a separate trench for each individual line.

Trenching can also be accomplished using hand tools or small hand held power equipment to avoid cutting roots. Any roots exposed during this work should be covered with wet burlap and kept moist until the soil can be replaced.

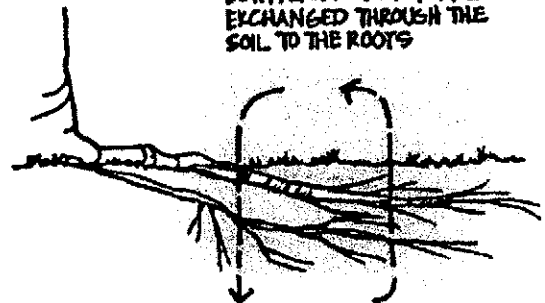
Soil Compaction and Paving

The roots depend upon an important exchange of both water and air through the soil within the protected zone. Any kind of activity that compacts the soil in this area blocks this exchange and can have serious long-term negative effects on the tree.

If paving material must be used, some recommended surfaces include brick paving with sand joints, or ground coverings such as wood chips (note the advantages of natural materials for providing nutrients under mulching).

SOIL COMPACTION

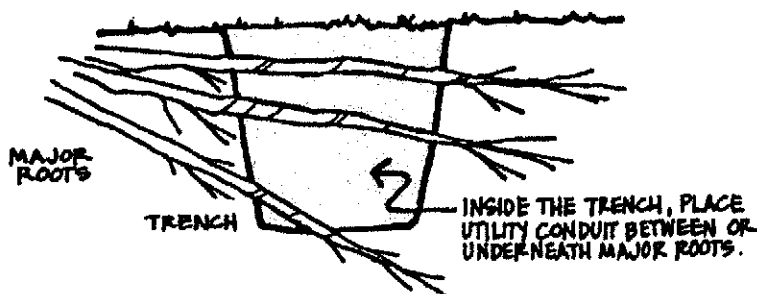
BOTH AIR AND WATER ARE EXCHANGED THROUGH THE SOIL TO THE ROOTS



HOWEVER, IF THE SOIL HAS BEEN COMPACTED, THIS EXCHANGE CANNOT OCCUR.



TRENCHING



MAINTENANCE

Watering

The key is prevention – **do not over water**. Improper watering is often overlooked as the cause of tree death because it can take years for the damage to show. Once the tree shows obvious signs of decline, it is often too late to correct the problem.

The seasonal weather pattern for this region is one of dry summers and winter rain. Oak trees are naturally drought tolerant and adapted to this cycle. If the tree is vigorous and thriving it should not require any additional water.

If the natural source of surface or underground water has been altered, some supplemental water may be necessary, but proceed with caution. The goal of any watering schedule for oak trees should be to supplement natural rainfall and it should occur only when the tree would normally receive moisture. This might be in the winter, if rains are unusually late, or in spring if rainfall has been below normal levels.

Over watering, especially during the summer months, causes a number of problems which can lead to decline and eventual death of the tree. It creates ideal conditions for attacks of Oak Root Fungus by allowing the fungus to breed all year. In addition, both evergreen and deciduous oaks grow vigorously in the spring and naturally go dormant in the summer. Extra water only encourages new tip growth which is subject to mildew. Oaks need this period of rest.

Newly planted oaks may need supplemental watering during their first few summers. After they become established water should be applied according to the previous guidelines.

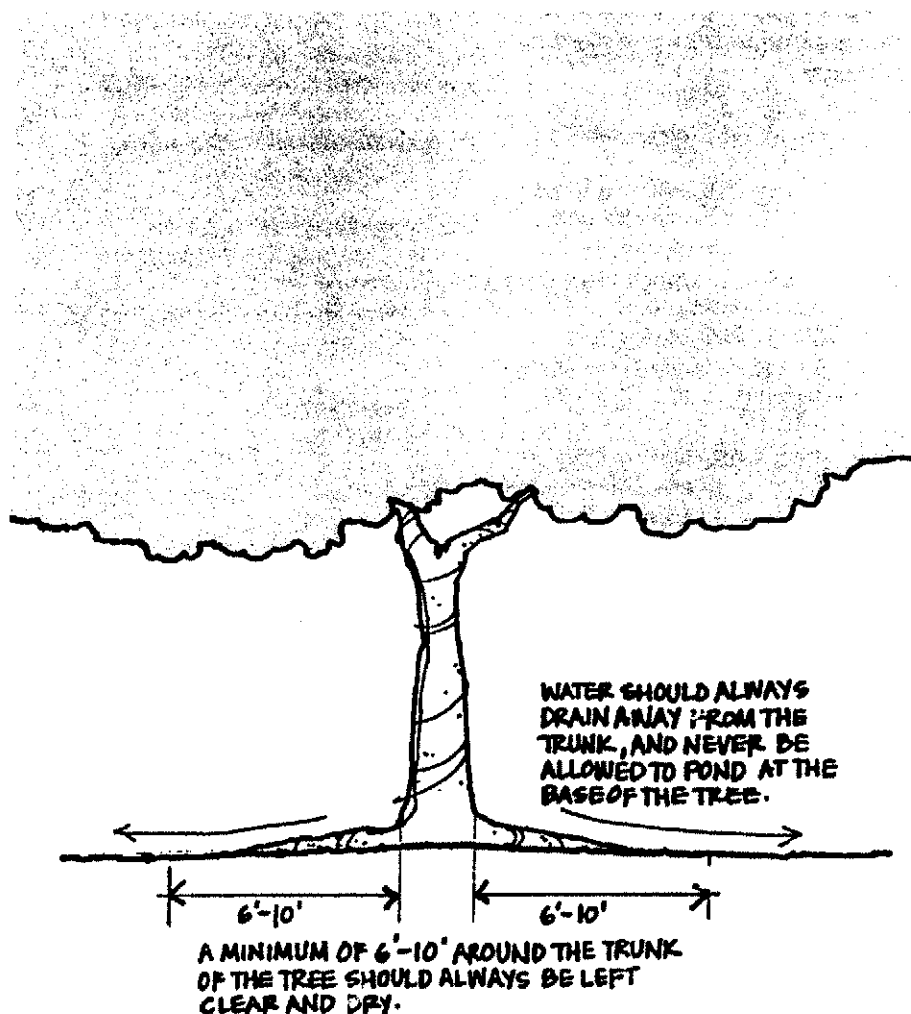
Pruning

For oak trees the periodic removal of dead wood during periods of tree dormancy should be the only pruning needed. Any cutting of green wood opens scars that could allow the entry of organisms or disease.

Before pruning obtain the advice of a certified arborist or other professional and consult the local city or county where the tree is located to find out what regulations apply. Pruning of both live and dead wood can sometimes require a permit.

Mulching

Leaf litter from the tree is the best mulch and should be allowed to remain on the ground within the protected zone. Crushed walnut shells or wood chips can be used, but the oak leaves that drop naturally provide the tree with a source of nutrients. Avoid the use of packaged or commercial oak leaf mulch which could contain Oak Root Fungus. Redwood chips should not be used due to certain chemicals present in the wood.



Disease and Pests

Trees that are stressed, especially because of improper watering practices, are prone to certain diseases and attacks by pests.

The most damaging of these diseases is the Oak Root Fungus *Armillaria mellea*. Occurring naturally in the soil, the fungus thrives under wet conditions and dies back in the summer when soils dry out. This is why summer watering of oaks can be a deadly practice. As noted in the watering guidelines, wet soil in the summer allows the fungus to grow all year. As the population grows, their natural food sources are depleted and they begin feeding on oak tree roots. The fungus does not require an open wound in the tree to gain entry.

Indications of the fungus include:

- die back of branches or tips.
- honey colored fungus at or near the root crown.
- white fan-like fungus between wood and bark.
- the presence of black, shoestring-like growths in the soil.

Once the tree begins to show obvious signs of infection treatment is generally ineffective. The best treatment is to *avoid* the conditions that lead to Oak Root Fungus infections.

Pit Scale, Oak Moth, and other pests: any significant changes in leaf color, branch die back, presence of black sooty materials on leaves or other changes should be noted. Seek the advice of a professional forester, arborist, farm advisor or other expert before the application of any pesticides on an oak tree.

Planting Underneath Oaks

The natural leaf litter is by far the best ground cover within the protected zone. If plants must be placed, the following guidelines should be followed:

There should be no planting within a minimum 6 to 10 feet of the trunk.

Avoid plants that require any supplemental water once established.

Choose plants suited for "dry shade." Those listed in the box below offer some good choices. To see some examples of how these plants have been used under oaks refer to the Additional Resources section on the following page.

PLANTS TO CONSIDER:

Plant Name	Description
<i>Arctostaphylos densiflora</i> 'Howard McMinn' Manzanita	3' high, 6' wide. Toughest of available forms. Whitish-pink flowers.
<i>Arctostaphylos edmundsii</i> Little Sur Manzanita	1-2' high, 4-5' wide. Tolerant of full shade.
<i>Arctostaphylos hookeri</i> Monterey Carpet Manzanita	1-2' high, spreading to 12' wide by rooting branches. White to pink flowers.
<i>Ceanothus griseus horizontalis</i> Carmel Creeper	Less than 2 1/2' tall, low & creeping. Clusters of small blue flowers.
<i>Heuchera</i> spp. Coral Bells	2-4' mound. Flowers on an upright stem 2-3" high and spotted with red or pink.
<i>Mahonia aquifolium compacta</i> Oregon Grape	2-4' high, spreading by underground roots. Bright yellow flower clusters.
<i>Ribes viburnifolium</i> Evergreen or Catalina Currant	2-3' high, spreading to 12' wide. Flowers pink to red in small clusters.

NOTES:

Before deciding on plants, check a source such as the Sunset Western Garden Book to determine which plants will grow in your area.

When choosing shade tolerant plants, consider that the ground under the south side of the tree will get more sunlight while the northern side will tend to remain more deeply shaded.

ADDITIONAL RESOURCES and Places to Visit

Public Agencies

County of Los Angeles Fire Department
Prevention Bureau, Forestry Division
5823 Rickenbacker Road, Rm #123
Commerce, CA 90040-3027
(323) 890-4330
<http://lacofd.org/forestry.htm>

University of California
Integrated Hardwood Range Management Program
163 Mulford Hall, Berkeley, CA 94720-3114
<http://danr.ucop.edu/ihmp>

Private Organizations

The Theodore Payne Foundation
10459 Tuxford Street
Sun Valley, CA 91352-2126
(818) 768-1802
www.theodorepayne.org

California Native Plant Society
1722 J Street, Suite 17
Sacramento, CA 95814-3033
(916) 447-2677
www.cnps.org

The California Oak Foundation
1212 Broadway, Suite 810
Oakland, CA 94612-1810
(510) 763-0282
www.californiaoaks.org

Arboreturns and Botanic Gardens

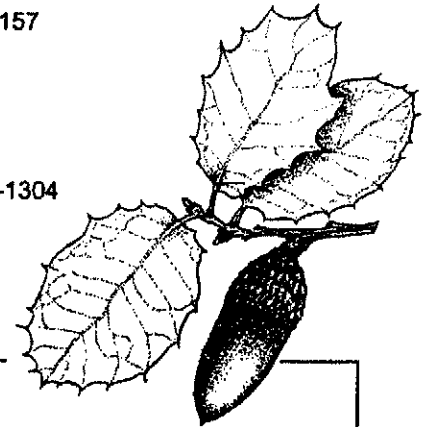
Los Angeles County Arboreta and Botanic Gardens
301 N. Baldwin Ave.
Arcadia, CA 91007-2697
(626) 821-3222
www.arboretum.org

Los Angeles County South Coast Botanic Garden
26300 Crenshaw Blvd.
Palos Verdes Peninsula, CA 90274-2515
(310) 544-6815
www.southcoastbotanicgarden.org

Los Angeles County Descanso Gardens
1418 Descanso Drive
La Canada-Flintridge, CA 91011-3102
(818) 949-4200
www.descansogardens.org

Rancho Santa Ana Botanic Garden
1500 North College
Claremont, CA 91711-3157
(909) 625-8767
www.rsabg.org

The Lummis Home
200 E. Avenue 43
Los Angeles, CA 90031-1304
(213) 222-0546



Publications

Compatible Plants Under and Around Oaks. Bruce W. Hagen... [et al]. The California Oak Foundation. 2000.

Growing California Native Plants. Marjorie G. Schmidt, Univ. California Press. 1981.

Illustrated Guide to the Oaks of the Southern Californian Floristic Province. Fred M. Roberts. FM Roberts Publications. 1996.

Living Among the Oaks: A Management Guide for Landowners. University of California Integrated Range Management Program. 1995.

Oaks of California. Bruce M. Pavlik...[et al]. Cachuma Press & the California Oak Foundation. 1995.

Proceedings of the Fifth Symposium on Oak Woodlands: Oaks in California's Changing Landscape. GTR PSW-GTR-184. Forest Service, U.S. Department of Agriculture. 2001.
Available from the University of California Integrated Hardwood Range Management Program.

Regenerating Rangeland Oaks in California. University of California Integrated Range Management Program. 2001.



County of Los Angeles Fire Department Forestry Division

County of Los Angeles Board of Supervisors

Gloria Molina, First District
Yvonne Brathwaite Burke, Second District
Zev Yaroslavsky, Third District
Don Knabe, Fourth District
Michael D. Antonovich, Fifth District

County of Los Angeles Fire Department

P. Michael Freeman, Fire Chief

Brush Clearance Unit
605 N. Angeleno Avenue
Azusa, CA 91702-2904
(626) 969-2375

Camp 17
6555 Stephens Ranch Road
La Verne, CA 91750-1144
(909) 593-7147

Environmental Review Unit
12605 Osborne Street
Pacoima, CA 91331-2129
(818) 890-5719

Fire Plan/Interpretive Unit
12605 Osborne Street
Pacoima, CA 91331-2129
(818) 890-5783

Fuel Modification Unit
605 N. Angeleno Avenue
Azusa, CA 91702-2904
(626) 969-5205

Henninger Flats Forestry Unit
2260 Pinecrest Drive
Altadena, CA 91001-2123
(626) 794-0675

Lake Hughes Forestry Unit
42150 N. Lake Hughes Road
Lake Hughes, CA 93532-9706
(661) 724-1810

Malibu Forestry Unit
942 N. Las Virgenes Road
Calabasas, CA 91302-2137
(818) 222-1108

San Dimas Forestry Unit
1910 N. Sycamore Canyon Road
San Dimas, CA 91773-1220
(909) 599-4615

Saugus Forestry Unit
28760 N. Bouquet Canyon Road
Saugus, CA 91390-1220
(661) 296-8558

Vegetation Management Unit
12605 Osborne Street
Pacoima, CA 91331-2129
(818) 890-5720

**GENERAL PLAN, SANTA CLARITA VALLEY AREA AND SPECIFIC PLAN
AMENDMENT
BURDEN OF PROOF**

Request

Newhall Land is requesting an amendment to the Los Angeles County General Plan, the Santa Clarita Valley Area-wide Plan (SCVAP), and the Newhall Ranch Specific Plan to modify the existing "secondary highway" designation for the "A" Street/Wolcott Road (also referred to as the Franklin Avenue extension), located between Long Canyon Road and SR-126, within the Newhall Ranch Specific Plan, which was approved by the County on May 27, 2003. The proposed amendment would reclassify "A" Street/Wolcott Road from a secondary highway to a collector street, and result in the removal of "A" Street/Wolcott Road from the General Plan's "Master Plan of Highways," since collector streets are not shown on this policy map. The proposed amendment would also result in the removal of "A" Street/Wolcott Road from the Circulation Plan of the SCVAP and would modify the street's designation on the approved Newhall Ranch Specific Plan's "Mobility Plan," on the Specific Plan's "Master Circulation Plan" exhibit, and on accompanying cross-sections.

The requested amendment is necessary to achieve a street designation that is safest, most consistent with, and most appropriate for the level of permitted development and anticipated circulation requirements under the "Traditional Neighborhood Development" (TND) land-use plan for the Landmark Village development within the Newhall Ranch Specific Plan. Since the street's original classification as a secondary highway, changes in circumstances have occurred to render the existing street classification inappropriate, unnecessary, and potentially unsafe for the current type and level of development proposed.

Background

In 1994, Newhall Land filed its entitlement application for the future development of Newhall Ranch, including the Newhall Ranch Specific Plan (NRSP), with the Department of Regional Planning (DRP). Among the entitlement applications submitted concurrently with the NRSP were requests for amendments to the Los Angeles County General Plan, the SCVAP, and the Newhall Ranch Specific Plan, to establish what is now referred to as "A" Street/Wolcott Road as a secondary highway within the future Landmark Village community. At the time, the secondary highway designation was appropriate based on the projected future traffic demands on this street segment. The Specific Plan proposed a maximum of 24,700 residential dwelling units and a total of approximately 5.7 million square feet (sf) of non-residential development within Newhall Ranch. Of those totals, 1,750 dwelling units and 1 million sf of non-residential floor-area were proposed for the portion of Newhall Ranch adjacent to and containing the proposed "A" Street and Wolcott Road. This Newhall Ranch community, referred to as "Landmark Village," is the area within Vesting Tentative Tract Map No. 53108.

Based on the proposed development for Landmark Village (1,750 dwelling units and 1 million sf of non-residential uses) and Newhall Ranch overall, future traffic volumes on "A" Street/Wolcott Road were projected to equal approximately 30,000 average daily trips (ADTs). (Austin-Foust

Associates, *Newhall Ranch Traffic Analysis*, July 1996.) This level of traffic warranted designation of the street as a secondary highway, which provides traffic capacities of 32,000 ADT's.

In October 1996, the Regional Planning Commission held its first meeting regarding the Newhall Ranch Specific Plan and directed Newhall Land to reduce the overall scale and intensity of proposed development. Newhall Land revised the Specific Plan to provide for a reduced number of proposed dwelling units and a lower level of non-residential development. In December 1997, the Regional Planning Commission approved the NRSP with the scaled-back development proposal. The Board of Supervisors further reduced the level of development permitted by the Specific Plan during its reviews in 1998 and 2003.

As a result of these changes to Newhall Ranch, the approved Specific Plan now permits a maximum of up to 20,885 residential dwelling units and a maximum of 5.5 million square feet of non-residential uses. This represents a reduction of approximately 15 percent from the 24,700 dwelling units originally proposed, and a decrease of approximately 3 percent in permitted non-residential development from that originally requested in 1994. For the Landmark Village community of Newhall Ranch, the maximum number of residential units was reduced from 1,750 dwelling units to a maximum of up to 1,444 dwelling units. This represents a reduction of approximately 17 percent in permitted residential development. (There was no change to the permitted non-residential development at Landmark Village.)

In addition to the general reduction in the scale of development and number of permitted residential units and non-residential floor-area, another significant change in circumstances has occurred since the development plan was first submitted in 1994 that warrants a "downgrading" of "A" Street/Wolcott Road from a secondary highway to a collector street classification. In its more detailed development plan for Landmark Village prepared following approval of the Specific Plan, Newhall Land has chosen a TND land-use plan for Landmark Village, which emphasizes pedestrian safety, comfort and the concept of "walkability." In summary, the land plan has been developed so that key community features, such as parks, schools and shopping, are within a reasonable walking distance from most homes. In order for the land plan to be effective, streets must be designed to promote pedestrian safety and prevent excessive traffic (including "cut-through" traffic) and unsafe vehicle speeds. In fact, the failure to appropriately match street design to the land plan could result in increased risk of accidents, greater public liability, and degraded pedestrian safety.

As part of this TND approach, the intended function and design of "A" Street/Wolcott Road, has changed over the years. "A" Street/Wolcott Road was originally conceived as an arterial highway extension of Franklin Avenue, in the Commerce Center area northeast of Landmark Village, connecting with Long Canyon Road. Under the TND approach, the function of "A" Street/Wolcott Road would be limited to providing connectivity between Landmark Village neighborhoods and from the local streets to the arterial highway system. In this way, "A" Street/Wolcott Road would discourage "cut-through" traffic as an alternative to SR-126. The street design was adjusted to match this shift in intended function. The alignment was made curvilinear, lengthening the total roadway distance; traffic-calming design features such as a

periodic landscaped median, curb bulb-outs, and on-street parking were incorporated; and modern roundabouts are proposed.

With the reduced scale of development permitted by the revised NRSP and the shift in the street's intended function as part of the TND land plan, projected traffic volumes on "A" Street/Wolcott Road may now be accommodated by a collector street, which has a capacity of approximately 10,000 ADT. Traffic volumes on "A" Street/Wolcott Road are projected to be less than 10,000 ADT's for all but a short segment on the west end, which is proposed to be served by a higher-capacity, four-lane section providing adequate capacity. (Austin-Foust Associates, *Landmark Village Traffic Impact Analysis*, October 2003.)

In summary, a change in street classification for "A" Street/Wolcott Road from a four-lane secondary highway to a collector street is appropriate and warranted because of the reduction in proposed development, the implementation of a TND land-use plan, and the resulting decrease in projected traffic volumes. Projected traffic volumes would be adequately served by a collector street designation, and the existing secondary highway designation would provide unnecessarily excessive capacity. Furthermore, requiring the secondary highway could result in the potential for increased vehicular speeds under the proposed TND land plan, while the collector street would be the appropriate context-sensitive designation.

Justification

Due to the changes in circumstances since the Newhall Ranch Specific Plan and accompanying entitlements were first filed and approved, as detailed above, the existing secondary highway street classification is no longer appropriate for "A" Street/Wolcott Road. In addition to the justification provided above, the following four responses must be demonstrated in the affirmative in support of this request for a General Plan/Specific Plan Amendment.

Response No. 1

A need for the proposed General Plan Amendment exists because:

The proposed General Plan/Specific Plan Amendment is necessary and appropriate to provide a street classification that corresponds with the projected level of traffic demand, while at the same time providing a safe pedestrian environment consistent with the adjacent land-use plan. Without the requested General Plan/Specific Plan amendment, the street classification would require that "A" Street/Wolcott Road be improved to provide excessive capacity, with more than three times the capacity (32,000 ADT's) of the projected future volumes (fewer than 10,000 ADT's). In addition, requiring "A" Street/Wolcott Road to be built to secondary highway standards while its functional use is as a collector street providing connectivity between neighborhoods and the local street system would result in the potential for unsafe conditions, including increased frequency of accidents, increased severity of injury and property damage/loss, and the potential for increased public liability. These safety and liability risks of maintaining the secondary highway designation in lieu of the requested collector street classification are discussed in more detail in Response No. 4, below.

Response No. 2

The particular amendment proposed is appropriate and proper because:

As noted above, the requested collector street designation, with a capacity of approximately 10,000 ADT's, is appropriate for the projected traffic demand of fewer than 10,000 ADT's. In addition, the collector street designation is the most appropriate choice in the context of the proposed TND land-use plan for Landmark Village. The TND land-use plan places importance on pedestrian safety and comfort, as community uses, such as schools, recreation, and shopping, are located within walking distance of most residences. The higher-speed, higher-volume secondary highway would be inconsistent with the land-use plan as well as providing traffic capacity far in excess of projected demand.

Response No. 3

Modified conditions warrant a revision to the County of Los Angeles General Plan because:

As discussed above, the following are the key changes in circumstances that result in the need for the requested General Plan/Specific Plan Amendment:

1. The level of permitted development, including the number of homes and the amount of proposed non-residential floor-area, has been scaled back significantly from the original Newhall Ranch proposal, in general, and in Landmark Village, specifically.
2. Following approval of the Newhall Ranch Specific Plan, Newhall Land selected a "Traditional Neighborhood Development" land-use plan for Landmark Village, which would change the intended function of "A" Street/Wolcott Road from a secondary highway – as originally planned, providing a connection from Commerce Center, on the northeast, to the western portion of Landmark Village and areas of Newhall Ranch to the south – to a collector street intended to provide internal connectivity within Landmark Village only, between neighborhoods and connecting to the local street system. The change in intended street function, as implemented in the curvilinear street design with traffic-calming features, would eliminate "cut-through" traffic. The TND land-use plan would also reduce the number of vehicle trips generated from the project, by encouraging residents to walk to near-by destinations.
3. The reduced level of permitted development, combined with the selection of a "TND" land-use plan, have significantly reduced the projected traffic levels on "A" Street/Wolcott Road. The projected traffic levels on "A" Street/Wolcott Road were originally estimated at approximately 30,000 ADT's, which required a secondary highway classification. Under the proposed Landmark Village development, the projected traffic levels have been significantly reduced to approximately 10,000 ADT's or less, which justifies the change in classification from a secondary highway to a collector street.

Response No. 4

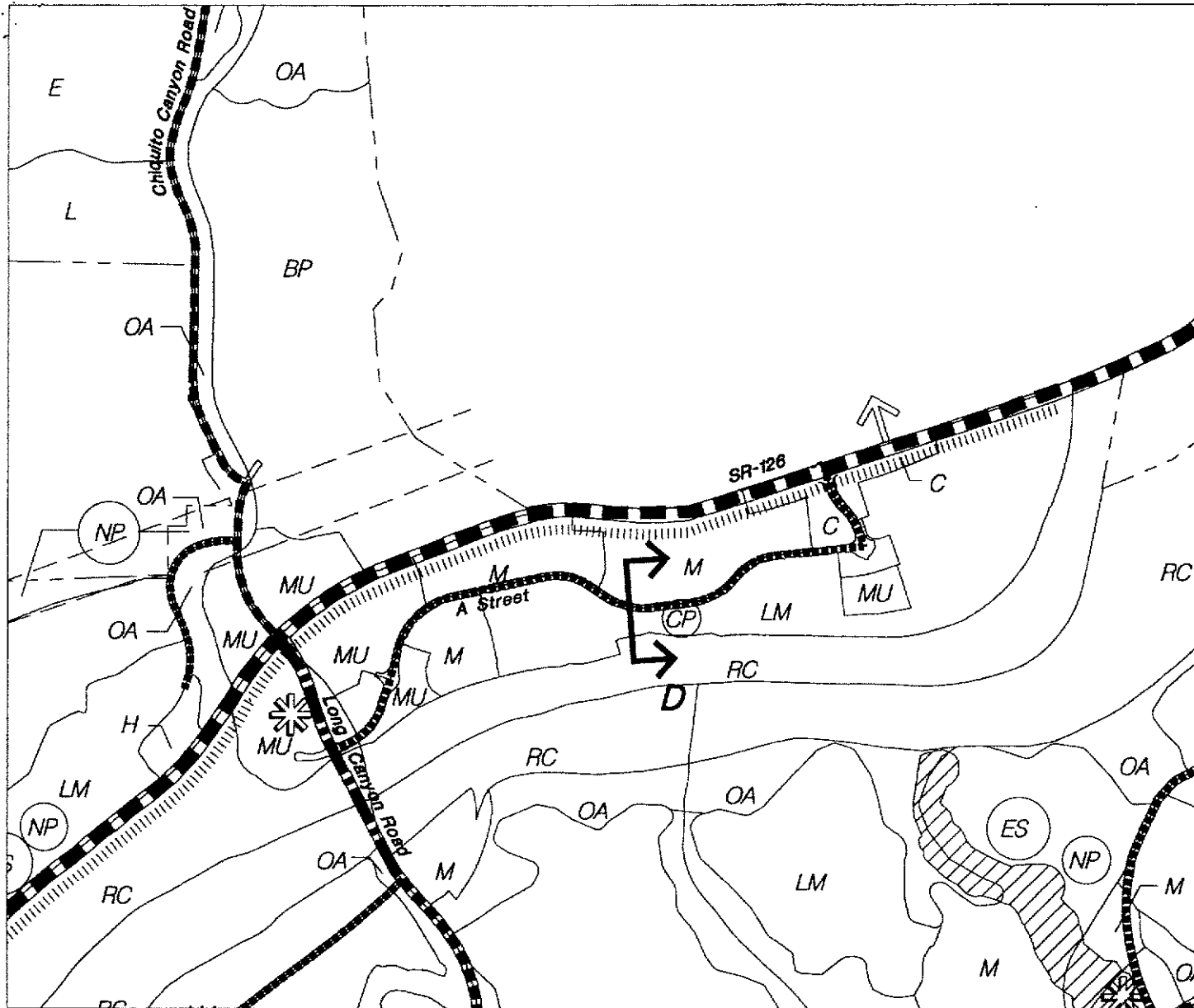
Approval of the proposed General Plan Amendment will be in the interest of public health, safety, and general welfare and in conformity with good planning practices because:

Approval of the requested General Plan/Specific Plan Amendment will result in significant contributions to the public health, safety and general welfare, including the following:

1. The requested collector street classification will result in safer conditions when compared to the existing secondary highway designation.
 - a. Based on research compiled by Newhall Land (*Traditional Neighborhood Development at Landmark Village, Newhall Ranch: The Role of Alternative Street Design in Traditional Neighborhood Development, Volumes I and II*, November, 2001; March, 2002), the number of traffic accidents would be reduced with the requested street designation, as demonstrated below.
 - b. In addition, as noted in the research referenced above, accident severity would also be diminished. Injuries to both motorists and pedestrians would be less severe under the requested street classification, generating fewer fatalities and less-severe injuries.
 - i. Motor vehicle accidents are the leading cause of accidental death in California, and 20 percent of accidents involve pedestrians. (*Dangerous by Design: Pedestrian Safety in California*, Surface Transportation Policy Project, and September 2000.)
 - ii. The second-leading cause of death for California children (ages 5-12) is pedestrian fatality. (*Ibid.*)
 - iii. There is a direct correlation between roadway width and vehicle speeds. (*Residential Street Typology and Injury Accident Frequency*, Swift, 2001.)
 - iv. Slower vehicle speeds result in greater stopping distance, a lower frequency of accidents, and reduced severity of injury from the smaller number of resulting accidents. (*Traditional Neighborhood Development Street Design Guidelines*, Institute of Transportation Engineers, October, 1999.)
2. By enhancing the pedestrian environment, the requested street classification would promote a healthier community.
 - a. The less-intrusive collector street classification would contribute toward the TND's goal of promoting walking as an alternative to driving to community destinations. For example, safe streets would allow children to walk to neighborhood schools. Studies show that walkable communities promote their residents' health. ("Healthy Neighborhood Streets – The Key to Stronger Communities", *On Common Ground*, Winter 2002.)
 - b. The safer, more comfortable pedestrian environment would also promote walking, jogging, bicycling and other recreational opportunities.

3. The requested street classification would promote the general welfare with enhanced property benefits:
 - a. Property owners would benefit from less property damage and fewer injuries associated with motor-vehicle accidents, as noted above.
 - b. Property owners could benefit from alternative financing programs provided to TND communities; such as the "location-efficient mortgage"¹ that recognizes the benefits of a safe and walkable community.
 - c. Studies show that property values are enhanced in "smart growth" communities such as a TND, when compared with the values of homes in conventional subdivisions. (Smart Growth Gateway, www.smartgrowthgateway.org.)
4. The requested amendment is consistent with good planning practices.
 - a. This request is consistent with the following American Planning Association's "Principals for Smart Growth:"
 - i. Create walkable neighborhoods;
 - ii. Foster distinctive, attractive places with a strong sense of place;
 - iii. Provide a variety of transportation choices; and
 - iv. Take advantage of compact building design.
 - b. This request is consistent with the following "Ahwahnee Principles," developed by the Local Government Commission to promote livable communities:
 - i. Community size should be designed so that housing, jobs, daily needs and other activities are within easy walking distance of each other;
 - ii. As many activities as possible should be located within easy walking distance of transit stops;
 - iii. Streets, pedestrian paths and bike paths should contribute to a system of fully-connected and interesting routes to all destinations. Their design should encourage pedestrian and bicycle use by being small and spatially defined by buildings, trees and lighting; and by discouraging high speed traffic; and
 - iv. The community design should help conserve resources and minimize waste.





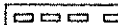

¹ The Location Efficient Mortgage®, (LEM) is a mortgage that helps people become homeowners in location efficient communities. These are convenient neighborhoods in which residents can walk from their homes to stores, schools, recreation, and public transportation. People who live in location efficient communities have less need to drive, which allows them to save money (with greater financial resources available for housing costs) and improves the environment for everyone. The LEM combines a low down payment, competitive interest rates, and flexible criteria for financial qualification to allow more people to own the home of their dreams. For additional information, please refer to www.locationefficiency.com.



NEWHALL RANCH. SPECIFIC PLAN

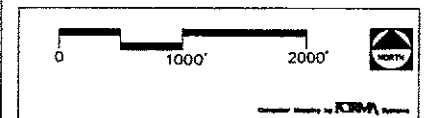
Prepared For: Newhall Ranch Company

LEGEND

-  STATE HIGHWAY
-  MAJOR HIGHWAY
-  SECONDARY HIGHWAY
-  COLLECTOR
-  POSSIBLE FUTURE COLLECTOR ALIGNMENT
-  BUS PULL-IN

Note:

'A' Street is proposed to be downgraded to a Collector Street as shown on Tentative Tract Map 53108 (see Typical Street Section).



**LANDMARK VILLAGE - A STREET
PROPOSED MASTER CIRCULATION PLAN**

JANUARY 2006

CONDITIONAL USE PERMIT
BURDEN OF PROOF
FOR (1) DEVELOPMENT WITHIN
A SIGNIFICANT ECOLOGICAL AREA
AND (2) UTILITIES
VTTM 053108

I. Background

Newhall Land is proposing to develop Landmark Village (formerly River Village), a 291-acre master planned neo-traditional community, located within the "Riverwood" village of the Newhall Ranch Specific Plan. The Specific Plan was approved by the County's Board of Supervisors on May 27, 2003. The Landmark Village project is designed to include a broad spectrum of residential housing, commercial development, institutional services, a community park, and other open space areas, consistent with the approved Specific Plan. The proposed project will implement a portion of the approved Specific Plan through development of 1,444 dwelling units and approximately 1,000,000-square feet of non-residential uses.

Newhall Ranch Program-Level SEA CUP No. 94-087-(5)

The County's Board of Supervisors approved a program-level Significant Ecological Area Conditional Use Permit ("SEA CUP"), SEA CUP No. 94-087-(5), in conjunction with the Board's approval of the Newhall Ranch Specific Plan on May 27, 2003.

CUP No. 94-087-(5) approved: (a) adjustments to the existing boundaries of SEA 23, consistent with General Plan policies requiring the protection of natural resources within SEAs; and (b) Specific Plan development within SEA 23 boundaries. The approved SEA boundary adjustments were found to be consistent with the adopted Specific Plan, which established a Specific Plan designation of "Special Management Area" ("SMA") over the adjusted SEA 23 boundaries. Although the adjusted boundaries within SEA 23 were identified as the "River Corridor SMA" in the adopted Specific Plan, the underlying SEA 23 designation remains in effect.

In approving CUP No. 94-087-(5), the Board specifically found that the proposed development under the approved Specific Plan was consistent with the adopted General Plan for the area (CUP, 43). The Board also found that the Specific Plan adjusted the existing SEA 23 boundaries by removing a limited amount of acreage for development from the existing SEA; however, the existing SEA nevertheless remained in a viable and largely natural condition (CUP, 18-21, 43). In addition, the Board found that the proposed development within SEA 23 conformed to the General Plan SEA "design compatibility criteria" (CUP, 21-36, 43).

Furthermore, the Board found that the Specific Plan is sensitive to, and compatible with, the biotic resources of SEA 23 (CUP, 43). In addition, the Board found that the Specific Plan development will not:

- (a) Adversely affect the health, peace, comfort, or welfare of persons residing or working in the surrounding area; or
- (b) Be materially detrimental to the use, enjoyment, or valuation of property of other persons located in the vicinity of the site; or
- (c) Jeopardize, endanger, or otherwise constitute a menace to the public health, safety, or general welfare (CUP, 43-44).

The Board also found that the Specific Plan site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping, and other development features prescribed in the Zoning Ordinance, or as otherwise required in order to integrate said uses within the uses in the surrounding areas (CUP, 44).

Finally, the Board found that the Specific Plan site is adequately served:

- (a) By highways or streets of sufficient width and improved as necessary to carry the kind and quantity of traffic such use would generate; and
- (b) By other public or private service facilities as are required (CUP, p. 44).

Based on the above findings, the Board approved CUP No. 94-087-(5) subject to various adopted conditions (CUP, 45).

Landmark Village Project-Level SEA CUP

As part of the Landmark Village project approvals, Newhall Land is requesting a project-level SEA CUP for proposed development associated with Landmark Village within SEA 23 in order to ensure consistency with both the adopted Specific Plan and approved program-level CUP No. 94-087-(5).

The proposed Landmark Village project site is approximately 291 acres in size. Of the 291 acres about 14 acres lie within SEA 23 and is designated as Open Area. Except for a portion of the approved Long Canyon Road Bridge alignment, the acreage within the SEA (14 acres) is designated as Open Area. Although some of SEA 23 contains sensitive riparian habitat, none of the proposed development areas is within this habitat.

Overview of the County's Significant Ecological Areas

This section provides information regarding the general background of the County's designated SEAs, and the constraints imposed by the County on development within SEAs, including the Newhall Ranch SEA 23.

The "Significant Ecological Area" designation is one of several land use classifications set forth in the Land Use Element of the Los Angeles County General Plan. SEA classification generally identifies lands having important biological resources. The classification includes habitats of rare and endangered species, sites with critical fish and wildlife values, relatively undisturbed areas of typical natural habitat and regionally scarce biotic resources. The intent of the General Plan is to preserve and enhance SEAs, to the extent possible, for the benefit of present and future County residents.

The purpose underlying SEA land use classification is to preserve SEA resources in an ecologically viable state. Several General Plan policies reflect that intent.

Other factors governing implementation of the General Plan's SEA goals and objectives include the County's ability to accurately identify areas of SEA resource value, the availability of financial and other resources necessary to support preservation, restoration and enhancement efforts, and the competing priorities between resource preservation and other critical public needs. The County's Zoning Ordinance further acknowledges that it is not the purpose of SEA designation to preclude development within SEAs, but rather to ensure, to the extent possible, that such development maintains and, where possible, enhances SEA biotic resources while allowing limited controlled development within SEAs.

SEA General Plan Development Process

Recognizing the resource values at stake and the constraints imposed by competing priorities and objectives, the General Plan seeks to provide a process for reconciling specific conflicts between proposed land uses and the preservation of identified SEAs. The General Plan does not, however, suggest that this can be accomplished by applying a single set of regulatory standards to all SEAs. Instead, the General Plan recognizes that measures necessary to preserve and enhance SEAs will vary depending upon the nature of the resource values present and the degree of threat implied by potential incompatible development. Within this context, the General Plan sets forth SEA compatible land uses and identifies SEA design compatibility criteria to guide specific land use decisions.

As stated above, the General Plan identifies certain uses, which are compatible with SEAs by definition, and certain uses that may be compatible. However, the General Plan notes that it "has not attempted to identify, in other than the most general terms, appropriate use types and intensities within significant ecological areas." Therefore, in order to determine whether a development proposal, in fact, is compatible with a particular SEA, the General Plan requires that the proposal be reviewed for compliance with certain "design compatibility criteria." The design criteria are as follows:

- (a) That the requested development is designed to be highly compatible with the biotic resources present, including the setting aside of appropriate and sufficient undisturbed areas;
- (b) That the requested development is designed to maintain waterbodies, watercourses, and their tributaries in a natural state;
- (c) That the requested development is designed so that wildlife movement corridors (migratory paths) are left in an undisturbed and natural state;
- (d) That the requested development retains sufficient natural vegetative cover and/or open areas to buffer critical resource areas from said requested development;
- (e) That where necessary, fences or walls are provided to buffer important habitat areas from development; and
- (f) That roads and utilities serving the proposed development are located and designed so as not to conflict with critical resources, habitat areas or migratory paths.

Newhall Ranch Specific Plan

The Newhall Ranch Specific Plan requires that a conditional use permit be filed pursuant to Section 22.56.215 (A)(1) of the County Zoning Code for all development proposed within an SMA (SEA).

Zoning Ordinance SEA Development Process

The General Plan requirement that development proposed within an SEA comply with the foregoing "design compatibility criteria" is implemented through provisions of the Los Angeles County Zoning Code. Pursuant to Section 22.56.215(A)(1) of the Code, an applicant must obtain a conditional use permit "prior to the issuance of any building or grading permits, approval of a minor land division or subdivision, or the commencement of any construction or enlargement

of any building or structure on a lot or parcel, which is in or partly in an area designated in the County General Plan and related maps as a significant ecological area."

The General Plan also requires that an application for a SEA conditional use permit undergo an "SEA Performance Review." This process involves review of the application by an appointed Significant Ecological Area Technical Advisory Committee ("SEATAC"). SEATAC reviews the application and accompanying biological resources report for its adequacy, and recommends conditions and guidelines for final project design. Considering the recommendations of SEATAC, the Los Angeles County Regional Planning Commission then takes action upon the proposed development plan.

Pursuant to the General Plan, the Regional Planning Commission recommendation for approval of proposed development within an SEA must be accompanied by a finding that the proposed development is sensitive to, and compatible with, the biotic resources identified in the permit application materials. If the Commission cannot make such a finding, it may deny the project, request a revised development plan, or approve and forward the proposal, together with a statement of overriding considerations, to the Board of Supervisors for further review and action.

Description of SEA 23

The Specific Plan River Corridor SMA (SEA 23) was approved in consideration of the resource values present in the Santa Clara River. The value of the SEA 23 is derived from the riparian habitats and associated species located within its boundaries, and the function of the SEA 23 as a regional wildlife corridor. The SEA 23 also includes habitat for the unarmored threespine stickleback, a state and federally listed endangered species, and other sensitive aquatic and riparian species known to occur within the Specific Plan site. Under the Specific Plan, some development is allowed within the boundaries of SEA 23, including but not limited to trails, wildlife preserves, scenic turnouts, agricultural operations, utilities necessary for public health and welfare, interpretive displays, vista points, and oil and gas operations. Under CUP No. 94-087-(5) three bridge crossings over the river were approved, including the Long Canyon Road Bridge, bank stabilization along portions of the SEA 23, and development on mostly agricultural land within the SEA 23.

II. Proposal

Consistent with the approved Specific Plan and program-level CUP No. 94-087-(5), Newhall Land proposes project-level improvements within SEA 23. The proposed improvements requested are as follows:

- (a) Long Canyon Road Bridge;

- (b) Trails and scenic vista path;
- (d) Bank stabilization;
- (e) Utilities (storm drain outlets, water quality basins, and utilities);
- (f) Agricultural wells;
- (g) Riparian mitigation sites;
- (h) Off-site transport of materials associated with grading; and
- (i) Metrolink right-of-way easement

Long Canyon Road Bridge

In conjunction with the Specific Plan approvals, CUP No. 94-087-(5) approved three elevated highway bridge crossings over the Santa Clara River, including the general alignment for Long Canyon Road Bridge (as well as Commerce Center Drive and San Martinez Grande Road). The number and general location of the bridge crossings were established in order to minimize impacts to sensitive habitat and species within SEA 23, and to minimize major access points to SR-126. Each of the bridge crossings is an extension of an existing road, creating a functional regional circulation system.

As part of the approval of CUP No. 94-087-(5), the County's Board of Supervisors found that the three bridge crossings were essential for a functional circulation system to serve the Specific Plan area and the region, and that the bridges were necessary to advance many of the County's goals and policies related to transportation, land use, and other issues of public interest (CUP, 33-34). The Board also considered and rejected a series of bridge alignment and bridge span alternatives in approving the three crossings via the Specific Plan and related CUP No. 94-087-(5). Each bridge crossing was found to comply with the County's engineering requirements, and to be strategically located and designed to provide maximum transportation effectiveness, while minimizing impacts to critical resources, habitat areas and animal movement paths in riparian corridor areas (CUP, 36-37).

Newhall Land is proposing to construct the Long Canyon Road Bridge component of the approved Specific Plan, as part of the Landmark Village project. Long Canyon Road Bridge will span the width of the Santa Clara River, equating to a roadway segment of approximately 1,100 feet in length and 100 feet in width. The highway bridge crossing is designated as a major

highway until it reaches the south side of the bridge, pursuant to the approved Specific Plan and the County Master Plan of Highways (south of the Santa Clara River, Long Canyon Road is designated as a secondary highway.)

Long Canyon Road Bridge will have 3 lanes of traffic in each direction. It will be designed to meet Department of Public Works standards and include curbs, gutters, sidewalks and a median. Support for the bridge will involve construction of concrete piers to be located within SEA 23. Abutments will be constructed on each side of the river.

Bank stabilization to reduce scour potential of the bridge is proposed along the perimeter of the abutments. The areas of bank stabilization are within SEA 23. Bridge construction will temporarily disturb the riverbed during grading, recompaction and construction. Vegetation along the riverbank and within the river itself will be removed and replaced. After construction, the riverbed will be returned to its natural state with the exception of the concrete supports and bridge abutments. Excavations will be designed to minimize riverbed disturbance, while satisfying the structural requirements of construction. The abutments have been designed to avoid significant riparian impacts.

The introduction of the bridge abutments into the Santa Clara River would have some restriction on flows during a capital flood. The placement of stabilization along the bridge abutments would reduce vegetation and, combined with the restriction of flows by the presence of the abutments, would increase the velocities of water traveling under the bridge. These increases are local in nature and are found immediately at the bridge abutments. Within 200 feet downstream of the bridge, capital storm velocities return to that experienced under the existing conditions of the river.

Newhall Land is authorized to continue the maintenance and operation of existing agricultural river crossings by the California Department of Fish and Game under an *"Agreement for Routine Maintenance Activities."* As part of the Landmark Village development, highway crossings over the Santa Clara River will be restricted to one location (Long Canyon Road Bridge), significantly less than the number of existing agricultural crossings, which are permitted to continue under applicable regulations. In addition, by elevating each bridge crossing, impacts to biotic resources within the SEA 23 are substantially minimized.

Trails

As part of the approved Specific Plan, the County's Board of Supervisors adopted the Newhall Ranch Master Trails Plan, Exhibit 2.4-5, which encompasses a comprehensive system of trails throughout the Specific Plan area, and provides potential connection points to regional trail systems within

the Santa Clarita Valley. The approved Master Trails Plan includes the following hierarchy of trails:

- (a) Regional River Trail;
- (b) Community Trails;
- (c) Local Trails;
- (d) Pathways; and
- (e) Unimproved Trails.

Of the approved trails, the Regional River Trail, located on the north side of the Santa Clara River and extending from the Castaic Creek to the western Specific Plan boundary, represents an important recreational feature of the approved Specific Plan, allowing both active and passive enjoyment of the Santa Clara River through the design of a combined pedestrian/bicycle/equestrian trail.

At the project-level, the Landmark Village development proposes several trails, consistent with the approved Specific Plan. The first includes a portion of the Regional River Trail, which spans and follows the southern boundary of the Landmark Village site. The Regional River Trail includes an improved pedestrian and bicycle route which offers view opportunities along the edge of the river. An equestrian trail will also be provided as a separate dirt trail approximately 3-5 feet from the improved trail. Newhall Land is also proposing a scenic vista path, permitted under the Specific Plan that consists of a 2,500-linear foot loop of nature path below the central portion of the Landmark Village site. The exact location, width, and construction material of the path will be determined after biological surveys have been conducted and the Department of Fish and Game as well as other resource agencies have been consulted.

Utilities

- *Utility Lines*

Landmark Village is an area disconnected from existing developable areas making utility extensions necessary. Utilities planned to serve the Landmark Village project may include, but not be limited to, water, sanitary sewer, gravity sewer, force main, irrigation, cable, gas, fiber optics and reclaimed water lines.

The utility courses will stretch from Los Angeles County Sanitation District No. 32, located directly southwest of the SR-126/I-5 Interchange, to the proposed

Water Reclamation Plant to be located approximately 1.6 miles west of the proposed project. It is unknown at this time the exact route the utilities will take across Landmark Village. However, it is necessary that the utility easements cross SEA 23 at two points beyond the geographic limits of Landmark Village: both east and west of the project directly south of the SR-126 right of way.

Utility lines including potable water, reclaimed water, communications systems ducts, electrical power, natural gas and sanitary sewer lines may also be hung from the Long Canyon Road Bridge, which crosses the SEA, to provide water to areas south of Landmark Village.

- *Water Quality Basins*

Consistent with the program-level CUP No. 94-087-(5), the Landmark Village project proposes installation of water quality basins and vegetated treatment swales located within the project and along the southern portion of the site. These basins and swales will be designed to capture first flush storm water (i.e., the first 0.75 inches of runoff) and non-storm water urban runoff from the developed areas within the Landmark Village project. These water quality basins and swales will be designed to the specifications of the County's Department of Public Works and the state Regional Water Quality Control Board. After treatment, water run-off will be conveyed through a closed or open channel to the river. This conveyance system will be within SEA 23. Water quality basins and swales will either be maintained by the Department of Public Works or a Landscape Maintenance District.

Clean sediment, periodically removed from debris basins located at the interface of undeveloped land areas where drainages have not entered the developed portions of the site, may be placed into the river area as approved by the various regulatory agencies. Necessary permits from the U.S. Army Corps of Engineers, State Department of Fish and Game, and the Regional Water Quality Control Board to allow for such placement of sediment, prior to construction of any development that contemplates debris basins or bank stabilization.

- *Storm Drain Outlets*

There are five proposed storm drain outlets to be installed within SEA 23. Each storm drain easement is approximately 25 feet in width and lies along the southern VTTM boundary. The easements barely jut out southerly from the VTTM into SEA 23 buffer zone. The easements do not extend beyond the width of the swath proposed for bank stabilization.

Bank Stabilization

The approved Specific Plan contemplated installation of bank stabilization along the Santa Clara River. The environmental effects of the bank stabilization were thoroughly assessed at the program level in the Newhall Ranch Final Additional Analysis, which was certified by the County's Board of Supervisors on May 27, 2003. At the project-level, the Landmark Village development includes limited bank stabilization to protect the project from erosion during capital storm events.

The design of the bank stabilization will be required to conform to the standards of the Department of Public Works. A total of approximately 10,620 lineal feet of bank stabilization will be required as part of the proposed project. The stabilization material will consist primarily of buried soil cement to minimize visual intrusion and to resist scouring. In limited instances, grouted rip-rap or concrete gunite will be installed at bridge abutments and other transition areas.

The bank stabilization along portions of the southern boundary of the project site will be designed and constructed to retain the river's significant riparian vegetation and habitat, to allow the river to continue to function as a regional wildlife corridor, and to provide flood protection pursuant to Los Angeles County standards.

Agricultural Wells

There are eleven existing agricultural wells. As a part of Landmark Village development, six (6) are proposed to remain although some may be relocated. Each water well will be 10,000 square-feet in land area.

Potential Riparian Mitigation Sites

Mitigation for impacts as a result of the Landmark Village development on riparian resources will include restoration of riparian habitat and may include enhancement activities. The general areas in which riparian mitigation activities may take place are shown on attached Newhall Ranch Specific Plan Exhibit 2-6.3, Candidate Riparian Restoration/Enhancement Areas.

Under the Specific Plan "Wildlife, nature, forest and marine preserves" use type is a permitted land use designation within SEA 23. Habitat restoration and enhancement associated with the Landmark Village development may consist of revegetation and/or rehabilitation of native plant communities on sites that have had the habitat removed due to past activities such as agricultural or oil and natural gas operations. Unavoidable impacts to riparian resources shall be minimized through project design, and then mitigated by the implementation of a revegetation and/or rehabilitation plan.

The restoration mitigation areas located within SEA 23 shall be in areas that have been disturbed by previous uses or cases. Mitigation shall be conducted only on sites where soils, hydrology, and microclimate conditions are suitable for riparian habitat. The candidate areas are comprised almost entirely of disturbed areas; therefore, after restoration, the sites can be considered "new" sensitive habitat within SEA 23. The goal is to increase habitat patch size and connectivity with other existing habitat patches while restoring habitat values that will benefit sensitive species.

Restoration of riparian habitats within SEA 23 shall use plant species native to the Santa Clara River. Cuttings or seeds of native plants shall be gathered within SEA 23 or purchased from nurseries with local supplies to provide good genetic stock for the replacement habitats.

Per the Specific Plan, four sites associated with the Landmark Village development have been determined to be conceivable "Candidate Riparian Restoration areas". One is located adjacent to the northeast corner of the project, just south of SR-126 and is approximately two acres in size. The second area and the largest of the four sites, approximately 16 acres and is located south of the western portion of the project. A potential 2.4-acre site lies south of the eastern portion of the project. These sites generally hug the boundary of the VTTM resulting in no obstruction to the riverbed. A last site lies just west of the project and continues to run west, south of SR-126.

Off-site Transport of Materials in Conjunction with Permitted Grading

There are two transport routes that are proposed to cross SEA 23, both of which coincide with operational agricultural river crossings permitted by the California Department of Fish and Game. Off-site transport of materials shall comply with all applicable requirements of other County departments and other governmental agencies.

Metrolink Right-of-Way Easement

In order to provide future residents in the Santa Clarita Valley (including Newhall Ranch) with alternative modes transportation, a Metrolink rail system line is proposed. The right-of-way easement for the line will vary from 35 feet to 50 feet in width and will run parallel to SR-126 extending east and west from the project. The easement will cross SEA 23 at two points beyond the geographic limits of Landmark Village: both east and west of the project directly south of the SR-126 right of way.

CONDITIONAL USE PERMIT
BURDEN OF PROOF

As part of the program CUP No. 94-087-(5), which was approved on May 27, 2003, the County's Board of Supervisors already determined that development within the Specific Plan SEA 23 met the County's requirements for issuance of a conditional use permit within a significant ecological area. Accordingly, the purpose for this section of the application is to show that the Landmark Village development is consistent with the approved Newhall Ranch Specific Plan, including the previously approved program CUP No. 94-087-(5). These uses specifically include trails, riparian restoration areas, storm drain outlets, water quality basins, utilities, proposed agricultural wells, Long Canyon Road Bridge, bank stabilization, the off-site transport of grading material, and the Metrolink easement. In addition, the applicant is concurrently requesting under this application, that the County permit publicly-owned and maintained uses necessary for the maintenance of the public health, convenience or general welfare ("public improvements") within the SEA 23 land designation. Substantiation is demonstrated by the following facts:

A. *That the requested use at the location will not:*

1. *Adversely affect the health, peace, comfort or welfare of persons residing or working in the surrounding area, or*

The County's Board of Supervisors already determined that the approved Specific Plan, including CUP No. 94-087-(5), will not "adversely affect the health, peace, comfort or welfare of persons residing or working in the surrounding area." Therefore, at the project-level, the pertinent question is whether the Landmark Village development is consistent with the approved Specific Plan and CUP No. 94-087-(5). If consistent, and absent any significant change in the Specific Plan or its circumstances, the Landmark Village development should necessarily satisfy the above SEA CUP requirement.

As part of the Landmark Village development, the Long Canyon Road Bridge component of the approved Specific Plan will be constructed. By allowing construction of the Long Canyon Road Bridge, a component of the Specific Plan's traffic circulation system will be implemented. This component will provide another traveling route for automobile traffic, which minimizes congestion and reduces traffic trip time for residents and visitors of the Newhall Ranch community. Under the Specific Plan, the Long Canyon Road Bridge was contemplated to be the primary elevated bridge crossing for the central portions of the Newhall Ranch community. It will provide the

necessary connection to SR-126 and direct access to the business park uses north of SR-126. As a result, the bridge will provide an important link between future residential areas south of the river and employment opportunities to the north. In addition, the bridge will provide an alternate route for residents and others to reach destinations both within and outside of the Specific Plan.

The Newhall Ranch land uses have been designed using a village concept, with higher intensity uses clustered into village centers. This land use arrangement promotes the reduction of vehicle miles traveled by permitting more people to live near shopping, services and recreation. Bridge crossings significantly reduce the travel distances between these village centers and the other commercial uses north of the river. As a result, the bridges improve traffic flow and efficiency and reduce automobile vehicle miles traveled. The Landmark Village development and the proposal to construct the Long Canyon Road Bridge are consistent with the above Specific Plan design objectives.

Specifically, Landmark Village will be designed utilizing compact development, which will minimize impacts on the environment when compared to lower density, scattered development. A significant environmental benefit associated with traditional neighborhood design is that it consumes less land than conventional suburban development, but it accommodates roughly the same amount of development. By focusing the proposed development within Landmark Village in less sensitive areas, the proposed development will avoid or minimize impacts on sensitive habitat associated with the river than may occur under a low density development alternative. It also prevents the fragmentation of wildlife habitat, reduces stormwater runoff, and conserves open space areas.

The Landmark Village development will also implement a portion of the Regional River Trail, along with other local trails contemplated by the approved Specific Plan. The location of the Regional River Trail and the other local trails is consistent with the Specific Plan, minimizes impacts to SEA 23, avoids conflicts with vehicles and is consistent with existing trail alignments in the Santa Clarita Valley.

The Specific Plan approved bank stabilization within SEA 23. The Landmark Village development would implement a portion of the approved bank stabilization along the southern boundary of the project site. The bank stabilization would be constructed, consistent with the requirements of the approved Specific Plan. The portion of the bank stabilization that will be part of the Long Canyon Road Bridge abutment represents a health and safety benefit to the public as it provides a base for the elevated bridge, which is designed to accommodate Long Canyon Road, a major highway designated

on the Mobility Plan of the approved Specific Plan and on the County's Master Plan of Highways.

The Landmark Village development will include installation of water quality basins, storm drain outlets and utility crossings (collectively, public improvements). These proposed improvements will be designed to minimize impacts to sensitive habitat and resources associated with the river. The improvements will also be designed to promote the health, safety and welfare of persons residing or working in the Landmark Village development.

The proposed restoration mitigation areas located within SEA 23 shall be in areas that have been disturbed by previous uses or activities. Candidate areas are comprised almost entirely of disturbed area; therefore, after restoration, the sites can be considered "new" sensitive habitat with SEA 23. The goal is to increase habitat patch size and connectivity with other existing habitat patches while restoring habitat values that will benefit sensitive species.

2. *Be materially detrimental to the use, enjoyment or valuation of property of other persons located in the vicinity of the site, or*

The County's Board of Supervisors already determined that the approved Specific Plan, including CUP No. 94-087-(5), will not "be materially detrimental to the use, enjoyment or valuation of property of other persons located in the vicinity of the site." The Landmark Village development implements a portion of the approved Specific Plan. The project-level development proposed within SEA 23 as part of the Landmark Village development is considered consistent with the approved Specific Plan. Accordingly, the Landmark Village development is not anticipated to be "detrimental" to the use, enjoyment or valuation of property or persons located in the vicinity of the project site. In fact, the proposed Landmark Village development would promote healthy living by offering an environment and infrastructure that would entice people outdoors. The interconnectivity of walking, hiking, equestrian and biking trails will allow residents to enjoy Newhall Ranch's topographic variety, mountain ranges, open vistas, and valleys.

- 3 *Jeopardize, endanger, or otherwise constitute a menace to the public health, safety or general welfare; and*

The County's Board of Supervisors already determined that the approved Specific Plan, including CUP No. 94-087-(5), will not "jeopardize, endanger, or otherwise constitute a menace to the public health, safety or general welfare." The Landmark Village development will provide improvements within SEA 23, consistent with the approved Specific Plan. The proposed project site is adequate to accommodate the improvements requested within

SEA 23, as discussed above. The proposed improvements are adequate in size and shape to accommodate all development features and standards required by the County.

- B. *That the proposed site is adequate in size and shape to accommodate the yards, walls, fences, parking, and loading facilities, landscaping and other development features prescribed in this Title 22, or as is otherwise required in order to integrate said use with the uses in the surrounding area;*

The County's Board of Supervisors already determined that the approved Specific Plan, including CUP No. 94-087-(5), satisfied the above requirements. The Landmark Village development will provide improvements within SEA 23, consistent with the approved Specific Plan. The proposed site is adequate for the improvements requested within SEA as discussed above. The applicant is not seeking any variances or exceptions to the County's development standards that may affect SEA 23.

- C. *That the proposed site is adequately served:*

1. *By the highways or streets of sufficient width, and improved as necessary to carry the kind and quantity of traffic such use would generate, and*

The County's Board of Supervisors already determined that the approved Specific Plan, including CUP No. 94-087-(5), is adequately served by highways and streets of sufficient width, and improved as necessary to carry the kind and quantity of traffic contemplated by the approved Specific Plan land uses. Consistent with the Specific Plan, the Landmark Village development will include a project-level circulation plan depicting the streets and highways required to accommodate the traffic generated by the proposed project. This project-level circulation plan is an integral part of the overall Landmark Village development, and has been designed to implement a number of the Specific Plan's circulation objectives. These objectives include improving the internal and external trips by future residents; providing opportunities for using alternative modes of transportation; and providing an aesthetically pleasing environment, while achieving the above mobility/circulation objectives.

Residents, bicyclists, hikers, equestrians, visitors and others will have close view of SEA 23. However, as noted above, mitigation measures and conditions of approval are in place to prevent harmful intrusion within SEA 23, thereby protecting its unique habitat value. No public or private service facilities are required or associated with development that will occur within the SEA 23.

2. By other public or private service facilities as are required.

The County's Board of Supervisors already determined that the Specific Plan site is adequately served by other public improvements and private service facilities, and that the Specific Plan itself will provide additional public and private service facilities as part of the Newhall Ranch community. Accordingly, the Board approved both the Specific Plan and CUP No. 94-087-(5). At the project level, as part of the Landmark Village development, the applicant will verify that capacity is available for all appropriate public and/or private service facilities to meet the needs of the proposed project. If deficiencies are identified, it is expected that, as part of the project, the applicant would be required to mitigate such impacts. Therefore, it is expected that, with appropriate conditions of approval, the proposed site will be adequately served by all required public and/or private service facilities.

ADDITIONAL BURDEN OF PROOF
FOR SEA FINDINGS
SECTION 22.56.215 F.2

The County's Board of Supervisors already determined that the approved Specific Plan, including CUP No. 94-087-(5), conformed with the General Plan's SEA six "design compatibility criteria." Presented below are the six design compatibility criteria, along with a summary substantiating both the Specific Plan's conformity with such criteria, as well as Landmark Village's conformity at the project level.

- 1. That the requested development is designed to be highly compatible with the biotic resources present, including the setting aside of appropriate and sufficient undisturbed areas.**

Specific Plan Summary

The County's Board of Supervisors already found that the Specific Plan and CUP No. 94-087-(5) met Design Compatibility Criterion No. 1, above. In summary, the Board found that the Specific Plan is considered highly compatible with the biotic resources present within the boundaries of the SEA 23 for the following reasons:

- (a) The Specific Plan set aside appropriate and sufficient undisturbed sensitive habitat areas within the existing boundaries of SEA 23;
- (b) The Specific Plan retained SEA 23 in a largely natural state;
- (c) Only a relatively small amount of sensitive habitat (*i.e.*, one acre, or 0.08 percent of the existing SEA) was redesignated for non-residential land uses;
- (d) The impacted areas would be fully mitigated;
- (e) The river would still be sufficiently wide (and in certain locations widened) to accommodate the County's Capital Flood and still retain the sensitive riparian vegetation;
- (f) Winter storm runoff would still continue to open its own channels through the river vegetation, flowing in a natural, non-invasive manner and preserve the meandering characteristics of the streambed;
- (g) The tributary canyons and bluffs on the south side of the river would still be preserved and provide an additional 444 acres (including 415 acres of undisturbed land), which would be dedicated to Open space areas adjacent to the river; and

- (h) Due to implementation of the Specific Plan, the amount of sensitive riparian habitat found in the existing SEA 23 would increase by approximately five acres and an additional 192 acres of additional sensitive habitat areas adjacent to the SEA 23 would be permanently preserved.

The Newhall Ranch Final Additional Analysis, Section 2.3, also addressed potential impacts due to channelization and bank hardening. Based on that analysis, the Board of Supervisors found that no significant increases in velocity, erosion or sedimentation would occur in the river; and, therefore, biotic resources present within the existing boundaries of SEA 23 would not be significantly impacted.

Landmark Village Summary

At the project level, the Landmark Village development within SEA 23 is designed to be highly compatible with biotic resources present within that corridor, including setting aside an appropriate and sufficient amount of undisturbed area, consistent with the approved Specific Plan. The project-level development proposed within SEA 23 includes the planned and approved Long Canyon Road Bridge abutments and piers. In addition, the project proposes to implement a portion of the approved Regional River Trail and other planned local trails. The proposed project will also include water quality basins and associated conveyance lines, utility crossings, storm drain outlets, and riparian mitigation sites. These proposed improvements were contemplated by the approved Specific Plan. The vast majority of SEA 23 will be left in a natural state, consistent with the Specific Plan.

- 2. That the requested development is designed to maintain water bodies, watercourses, and their tributaries in a natural state.**

Specific Plan Summary

The County's Board of Supervisors already found that the Specific Plan and CUP No. 94-087-(5) met Design Compatibility Criterion No. 2, above. In summary, the Board found that the Specific Plan has been designed to maintain waterbodies, watercourses, and their tributaries in a natural state. As indicated above, the Board also found that no significant increases in velocity, erosion, or sedimentation would occur in the river because of the Specific Plan. During most storm events, the velocity and depth of the river would remain unchanged from current conditions, since the course of the river is able to meander without being constrained by bridge abutments or bank protection. It is only in the infrequent, 50- to 100-year event where small increases in depth or velocity will occur at certain locations along the river. In making these findings, the Board

relied on the Newhall Ranch Final Additional Analysis, Section 2.3, which provided a detailed analysis of the Specific Plan impacts to the floodplain areas within the site, including the depth and velocity of water flow in the Santa Clara River. Based on that analysis, the Board found that the Specific Plan's projected river flow increases did not significantly affect the water flow in the river.

Landmark Village Summary

As contemplated by the approved Specific Plan, Long Canyon Road Bridge will require the placement of abutments and piers in the river area; however, the effect of each bridge crossing, including Long Canyon Road Bridge, was thoroughly assessed in the Newhall Ranch Final Additional Analysis, Section 2.3, Floodplain Modifications. At the project level, the environmental analysis will further address the bridge abutments and piers to further assess impacts, if any, to the river corridor.

As contemplated by the approved Specific Plan, the Landmark Village development will include bank stabilization, but only where necessary to protect development from erosion. Bank stabilization is proposed to be ungrouted rock in all areas except at outlet structures, access ramps, and bridge abutments where it is expected that grouted rock or reinforced concrete will be required to meet Los Angeles County Department of Public Works standards. Alternative materials to rip rap for bank stabilization, including buried soil cement, will be considered by the Department of Public Works Flood Control section. Bank stabilization specifications will be further developed as part of the environmental review process for the Landmark Village development.

- 3. That the requested development is designed so that wildlife movement corridors (migratory paths) are left in an undisturbed and natural state.**

Specific Plan Summary

The County's Board of Supervisors already found that the Specific Plan and CUP No. 94-087-(5) met Design Compatibility Criterion No. 3, above. In summary, the Board found that under the Specific Plan, SEA 23 would continue to function as a wildlife movement corridor because the Specific Plan design retained both the riparian vegetation in the river and the natural flow of the water without the need for periodic vegetation clearing. The Board also found that the Specific Plan showed a substantially reduced level of impact to sensitive riparian habitat along the Santa Clara River (the originally proposed 103 acres of impact was reduced to approximately one acre). The Board further found that the Specific Plan resulted in an increase of five acres in the amount of sensitive riparian

habitat along the river, and that the Specific Plan established transition areas to separate SEA 23 from the urban uses identified in the Land Use Plan. In addition, the Board found that the three bridges over the river would be sufficiently high as to allow the continued use of the river by animals for movement east to west along and within the river route, and that lighting controls would ensure that SEA 23 would continue to function as a wildlife movement corridor. The Board also found that Section 2.5 (Public Services and Facilities Plan) and Section 2.6 (Resources Management Plan) of the Specific Plan provide objectives and conceptual plans for preserving the river and Salt Canyon in a natural and undisturbed state. Finally, the Board found that the Newhall Ranch Final EIR and Additional Analysis addressed impacts and imposed mitigation measures for the identified impacts that would occur. As a condition of approval, the Board also required the applicant to conserve in perpetuity approximately 1,517 acres of the Salt Creek watershed in Ventura County, adjacent to the Specific Plan site, which enhances the Specific Plan's compatibility with animal movement in the region.

Moreover, the Board found that the tributaries (Castaic, San Martinez, and Chiquito Canyon Creeks) to the Santa Clara River within SEA 23 would all be maintained and preserved in a largely natural state with soft bottoms pursuant to Section 2.5 (Public Services and Facilities Plan) and Section 2.6 (Resources Management Plan) of the Specific Plan. Furthermore, the Board found that the remainder of these tributaries outside SEA 23 but within the Specific Plan were designated open space areas and preserved in a largely natural state.

The Board also found that the Salt Canyon area of the Specific Plan served as a wildlife movement corridor, and that the limited development proposed within SEA 23 would not have any impact upon this wildlife movement area. As indicated above, the Board required the applicant to dedicate 1,517 acres of the Salt Creek watershed in Ventura County, adjacent to the Specific Plan site, in perpetuity, thereby enhancing the Specific Plan's compatibility with animal movement in the region.

In addition, the Board noted that Caltrans had completed the widening of SR-126 from Fillmore in Ventura County to the I-5 freeway in Los Angeles County. As part of that widening project, major north/south animal movement undercrossings were installed under SR-126 at three locations. In addition, three additional larger undercrossings exist along SR-126 within the Specific Plan area at locations where bridges and culverts were constructed over secondary tributary stream courses. Because the undercrossings were designed to facilitate north/south wildlife movement, and because the three undercrossings within the Specific Plan site are of sufficient size to accommodate north/south wildlife movement, the Board found that north/south connectivity across the Santa Clara River will not

be significantly impacted. The Board's findings were supported by the Newhall Ranch Final Additional Analysis, Section 2.2, Salt Creek Corridor.

Landmark Village Summary

Consistent with the approved Specific Plan, for the most part, animal migratory paths within the SEA 23 will be left in an undisturbed, natural state. Again, the exception will be at the Long Canyon Road Bridge abutment and pier locations. All construction-related impacts of proposed development within the SEA 23 will be further assessed as part of the environmental review process for the Landmark Village development with mitigation measures imposed as appropriate.

Other proposed development within SEA 23 – (trails, storm drain outlets, water quality basins, utility lines, agricultural wells, Long Canyon Road Bridge, bank stabilization, and off-site transport of grading materials) – will have a de minimus impact on migratory pathways, and the riparian mitigation areas will actually prove to provide beneficial cover for migratory animals.

- 4. That the requested development retains sufficient natural vegetative cover and/or open spaces to buffer critical resource areas from said requested development.**

Specific Plan Summary

The County's Board of Supervisors already found that the Specific Plan and CUP No. 94-087-(5) met Design Compatibility Criterion No. 4, above. In summary, the Board found that the Specific Plan retained sufficient natural vegetative cover and open space areas to buffer critical resources found in SEA 23 from the proposed development shown in the Specific Plan. Furthermore, the Board found that implementation of the Specific Plan would result in the direct preservation of 1,390 acres of land along the Santa Clara River Corridor within the boundaries of the Specific Plan area. In addition, the Board found that the Specific Plan incorporated an extensive buffer area to protect critical resources within SEA 23.

Landmark Village Summary

Consistent with the approved Specific Plan, the requested development within Landmark Village will retain sufficient natural vegetative cover and/or open space areas to complement SEA 23. As part of the Landmark Village development, a setback or buffer zone will be established along the southern boundary of the project site to protect sensitive habitat along the SEA 23. Furthermore, the vegetation within

portions of the setback or buffer zone will be restored and/or enhanced to increase habitat values when compared to existing conditions.

- 5. That where necessary, fences or walls are provided to buffer important habitat areas from development.**

Specific Plan Summary

The County's Board of Supervisors already found that the Specific Plan and CUP No. 94-087-(5) met Design Compatibility Criterion No. 5, above. In summary, the Board found that the discussion of Design Compatibility Criterion No. 4, above, described how the Specific Plan incorporated vegetative cover and open space areas to buffer critical resources from the proposed uses in the Specific Plan. In addition to these features, the Board found that the Specific Plan also buffered habitat from proposed uses through development regulations and design guidelines. As indicated in Chapter 4 of the Specific Plan, future residential subdivisions and commercial development constructed within the Specific Plan area must include fences or walls that will preclude access to sensitive resources within SEA 23. As each tract or parcel map is submitted to the County, it must be reviewed to determine whether proposed uses substantially comply with the standards, regulations, and guidelines of the Specific Plan, including those pertaining to fencing and walls to ensure that they buffer important SEA 23 habitat areas from development.

Landmark Village Summary

Consistent with the approved Specific Plan, the Landmark Village development proposes fences and walls to protect significant habitat within the SEA 23. In addition, other mitigation measures and conditions of approval will be adopted to ensure the protection of sensitive biotic resources within the SEA 23 (e.g., shielding of illumination). The locations of the designated fences and walls and their relation to the SEA 23 will be further assessed during the environmental review process for the Landmark Village development.

- 6. That roads and utilities serving the proposed development are located and designed so as not to conflict with critical resources, habitat areas or migratory paths.**

Specific Plan Summary

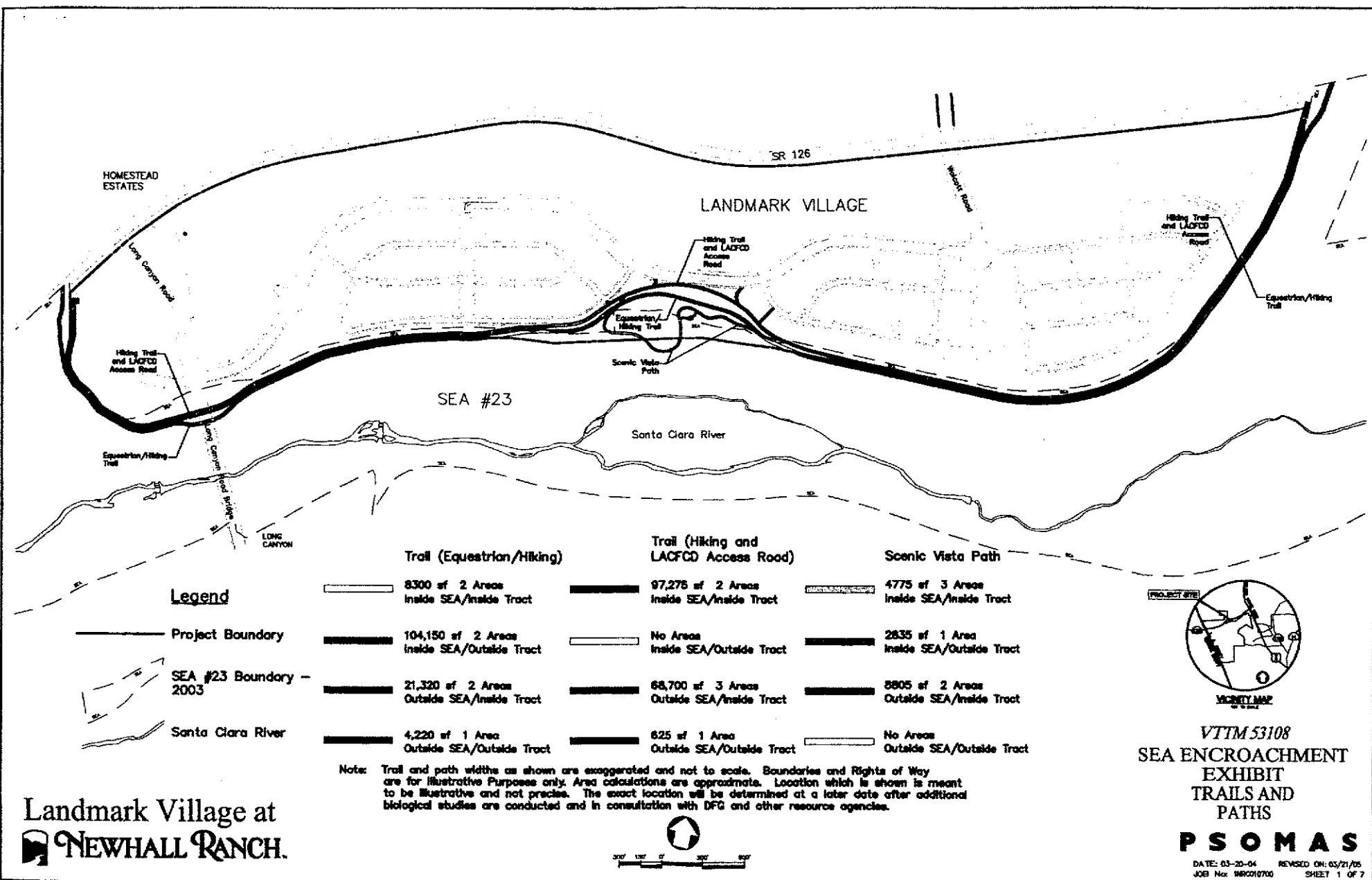
The County's Board of Supervisors already found that the Specific Plan and CUP No. 94-087-(5) met Design Compatibility Criterion No. 6, above. In summary, the Board found that the Specific Plan proposed the construction of three bridges and several utility lines across the Santa

Clara River, within the existing SEA 23. Utilities serving the proposed Specific Plan, where feasible, would be incorporated with the river bridges.

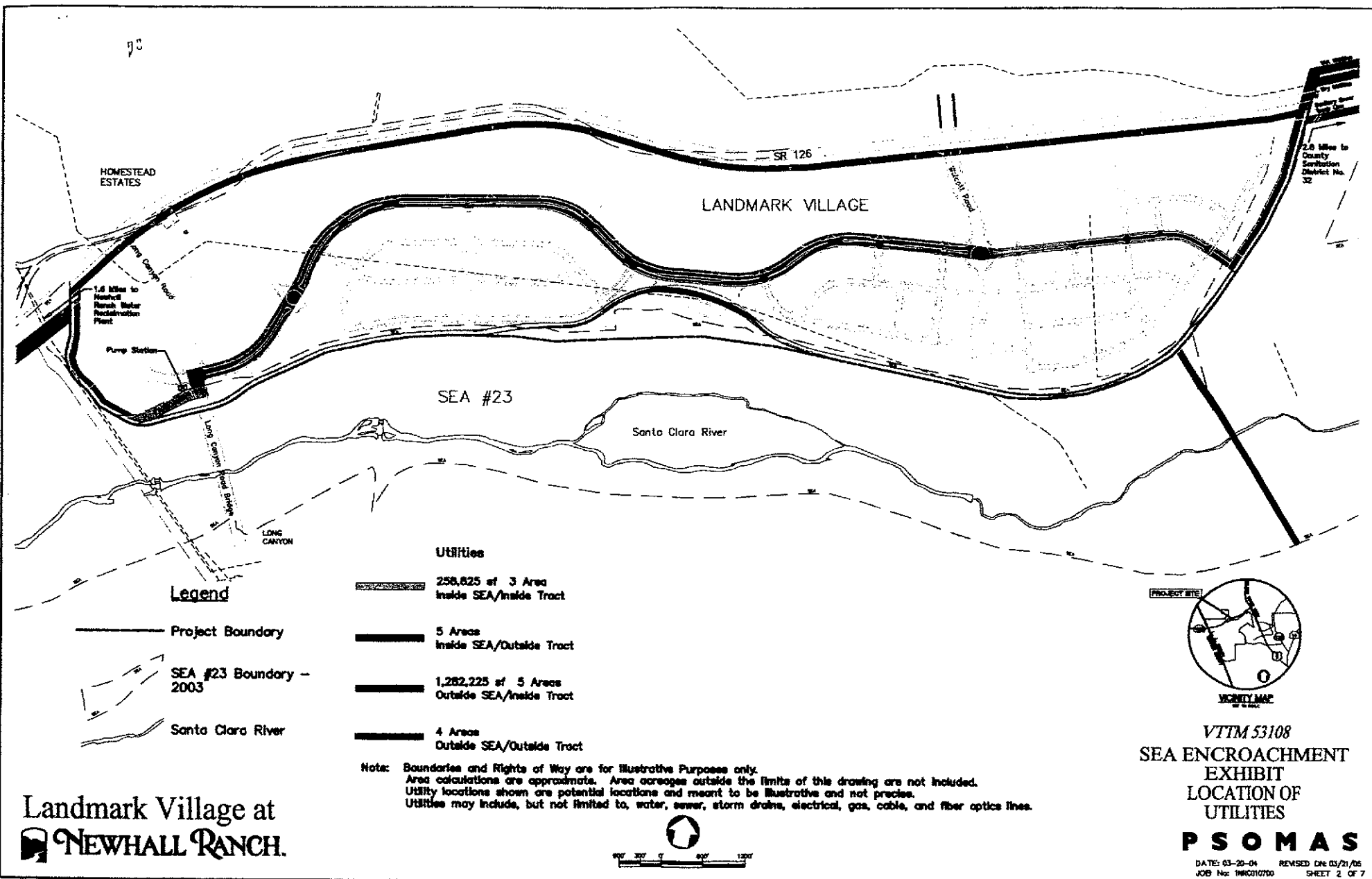
The Board also found that the bridge crossings would have support columns in the riverbed, but the crossings are elevated structures so as to reduce impacts on river vegetation and sensitive species and to allow species that move along the river course to continue to use existing resources. Moreover, the Board found that the elevated bridge crossings would ultimately replace the existing at-grade agriculture crossings, which would minimize the amount of direct disturbance to the riverbed and its environs. Based on the assessment provided in the Newhall Ranch Final Additional Analysis, Section 2.4, SEA General Plan Consistency, the Board concluded that the roads and utilities serving the Specific Plan were located and designed so as not to conflict with critical resources, habitat areas or migratory paths.

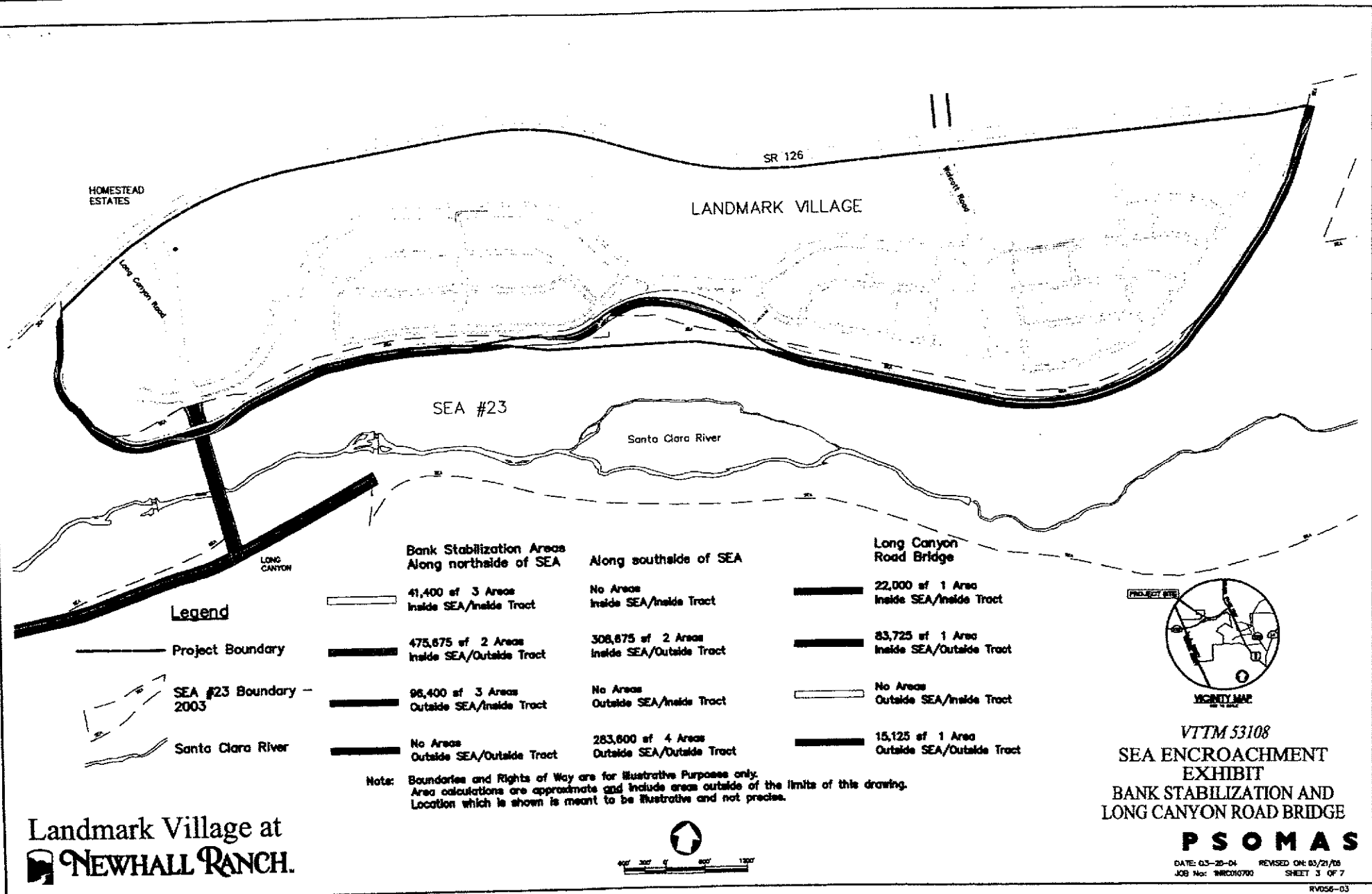
Landmark Village Summary

Consistent with the approved Specific Plan, at the project level, the Landmark Village development will design and locate project roads and utilities so as not to conflict with critical resources, habitat areas or migratory paths. The vast majority of roadways and utilities serving Landmark Village are removed far to the north of SEA 23 and has no impacts on it. The number and location of the bridge crossings were established by the Specific Plan in part to minimize impacts on SEA 23 and other sensitive resources. As part of the Landmark Village development, the Long Canyon Road Bridge crossing will be implemented. All other roads within the Landmark Village development are designed to parallel SEA and loop back to the planned Long Canyon Road Bridge crossing, or to SR-126. All roads used by daily vehicular traffic are outside SEA 23. Only minor encroachment from trails and public improvements encroach within the SEA. The roads and utilities serving the Landmark Village development will be further assessed as part of the environmental review process for the proposed project.

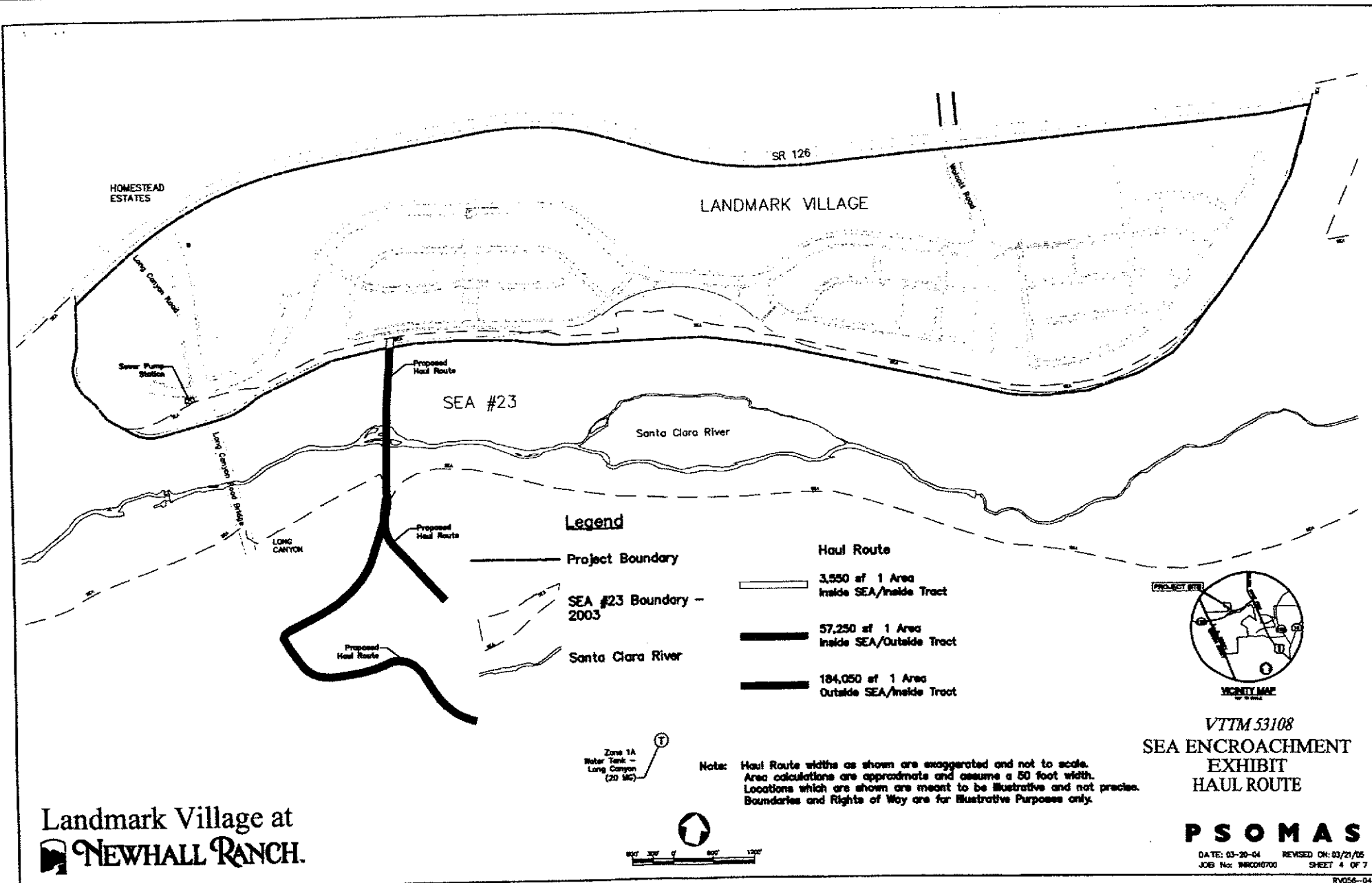


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Landmark Village at
NEWHALL RANCH.

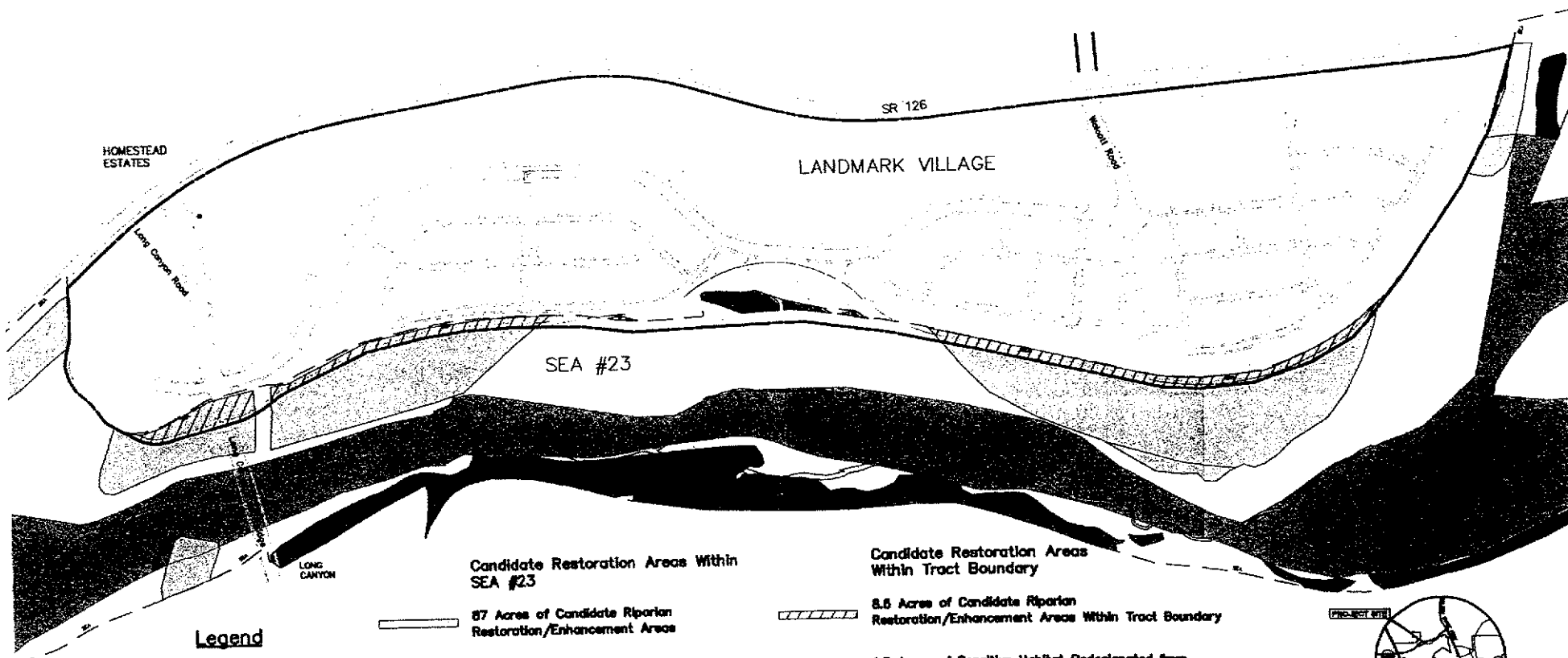
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 SEA ENCROACHMENT
 EXHIBIT
 HAUL ROUTE

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Legend

- Project Boundary
- SEA #23 Boundary - 2003
- ~ Santa Clara River

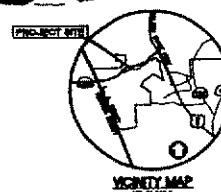
Candidate Restoration Areas Within SEA #23

- 87 Acres of Candidate Riparian Restoration/Enhancement Areas
- 106 Acres of Sensitive Habitat Redesignated from Residential and Non-Residential Land Uses to Proposed SEA #23
- 14 Acres of Sensitive Habitat Added to Proposed SEA #23
- Water Course

Candidate Restoration Areas Within Tract Boundary

- 8.6 Acres of Candidate Riparian Restoration/Enhancement Areas Within Tract Boundary
- 1.5 Acres of Sensitive Habitat Redesignated from Residential and Non-Residential Land Uses to Proposed SEA #23 Within Tract Boundary
- No Areas of Sensitive Habitat Added to Proposed SEA #23 Within Tract Boundary

Note: Not all of Candidate Restoration Areas outside of the Tract Boundary are shown. Boundaries and Rights of Way are for illustrative purposes only. Area calculations are approximate and include Candidate Restoration Areas outside of the limits of this drawing. Locations of Candidate Restoration Areas are meant to be illustrative and precise location may shift based on more detailed, future biological surveys.

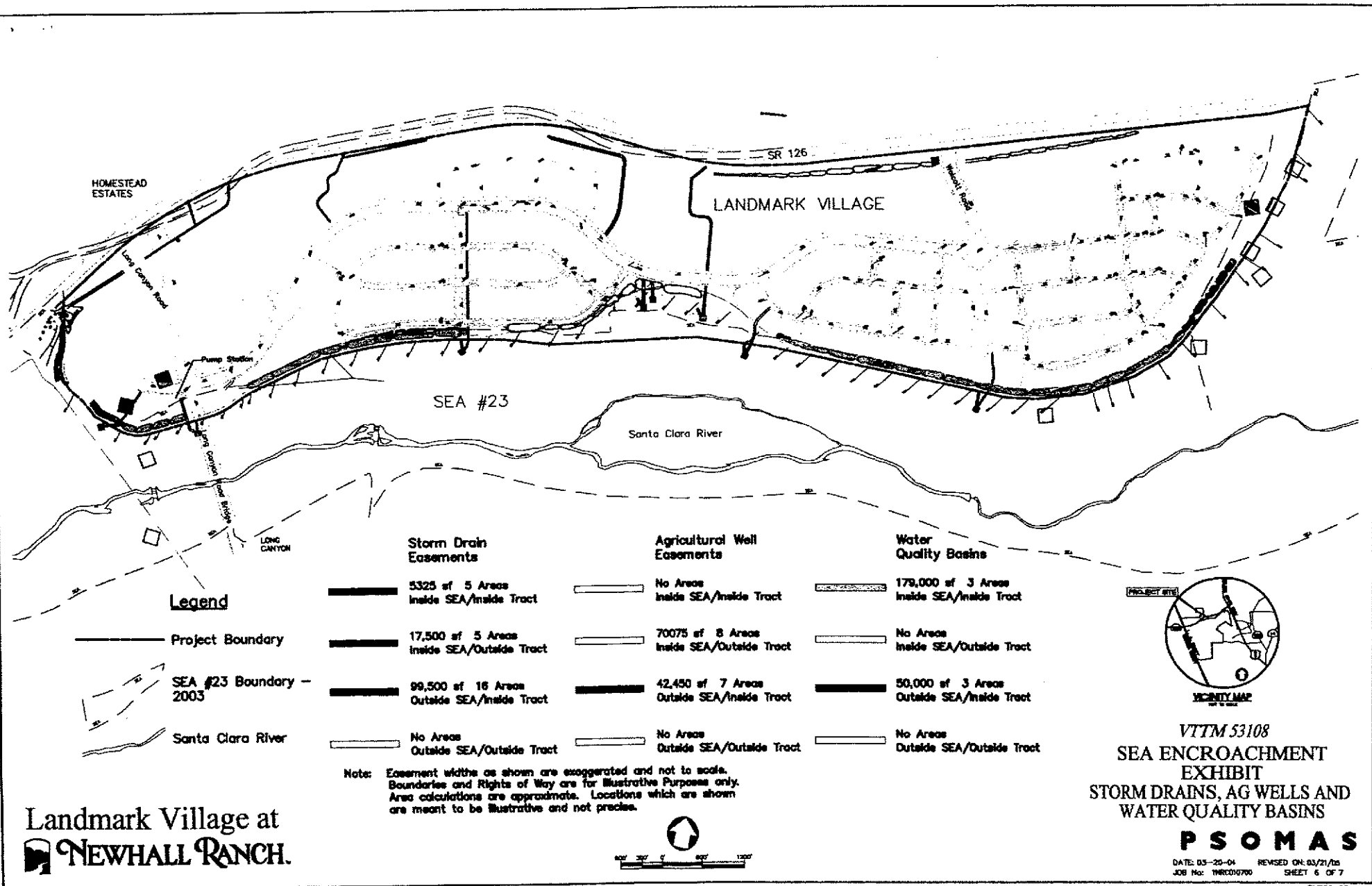


Landmark Village at
NEWHALL RANCH.

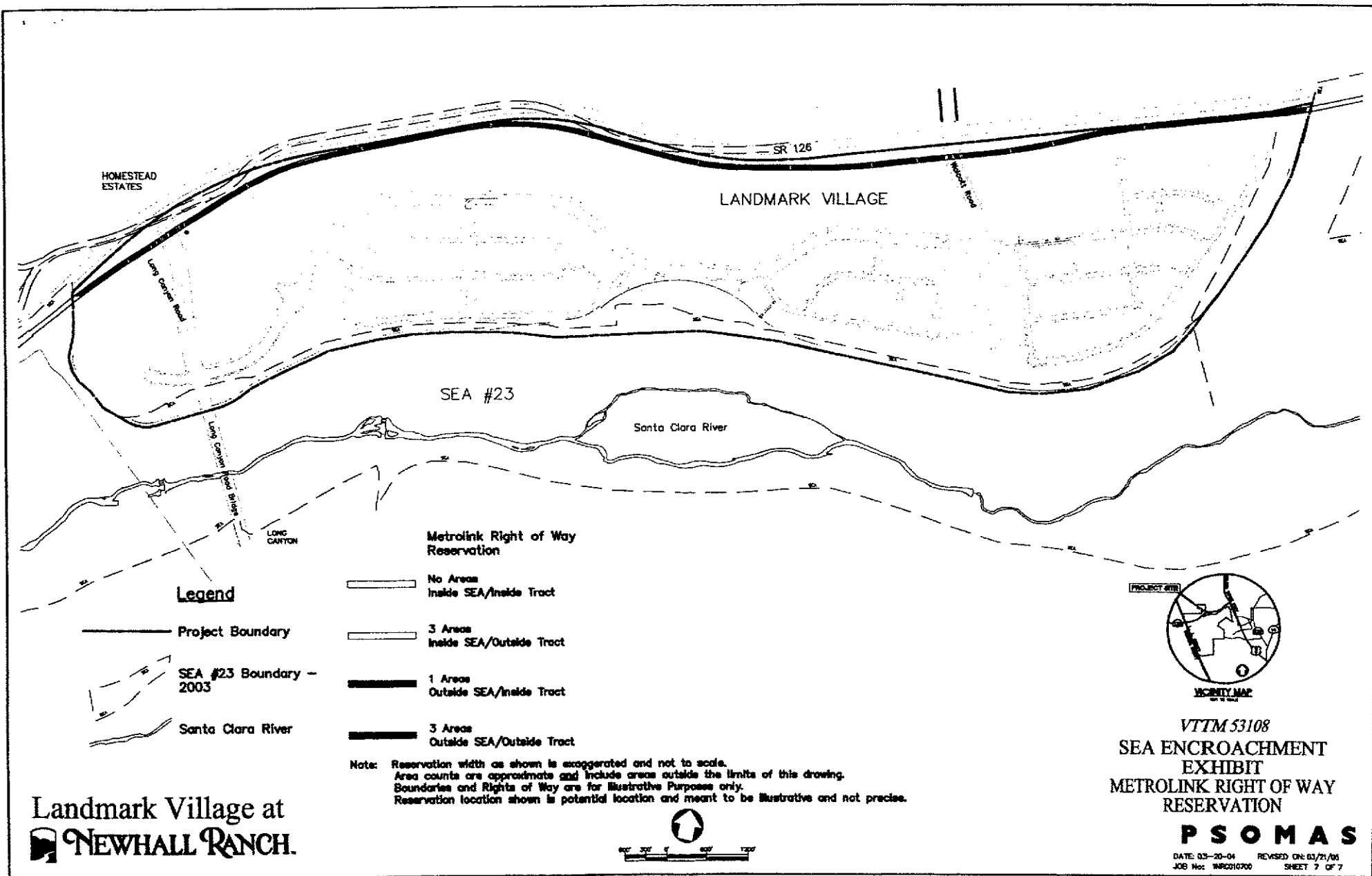
VTTM 53108
SEA ENCROACHMENT
EXHIBIT
CANDIDATE
RESTORATION AREAS
PSOMAS

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CONDITIONAL USE PERMIT
BURDEN OF PROOF
FOR (1) OFF-SITE TRANSPORT OF MATERIALS,
(2) GRADING OF DEBRIS BASINS, AND
(3) GRADING FOR THE WIDENING OF SR-126.
VTTM No. 053108

Background

In order to implement the development of Landmark Village (formerly River Village), it will be necessary to import fill material from Adobe Canyon. It will also be necessary to grade for debris basins in Chiquito Canyon and grade for the widening of SR-126.

Newhall Land Company will need a net import of 6 million cubic yards of fill material from a potential borrow site (see "Proposed Adobe Canyon Borrow Site Haul Route" exhibit). The borrow site that has been identified, is located at Adobe Canyon about 4,000 feet south of SR 126, which is south of Landmark Village, south of the Santa Clara River, and east of the planned future Long Canyon Road.

There are two proposed haul routes for exporting the fill material from Adobe Canyon (see *Proposed Borrow Site Haul Route* exhibit). Newhall Land would arrange for the material to be exported via truck or scraper from two distinct locations within the borrow site. The two haul routes would then merge onto an existing agricultural crossing that would cross the Santa Clara River and enter Landmark Village. The first proposed haul route begins toward the center of the borrow site and travels west to the existing agricultural crossing. The second proposed haul route begins in the northwest corner of the borrow site and merges on to the existing agricultural crossing, which then heads north into Landmark Village (see exhibit).

It will also be necessary to grade the debris basins in Chiquito Canyon north of SR-126 concurrently with the grading required for the widening of SR-126 so as to avoid wiping out the debris basins within Chiquito Canyon from the grading of SR-126 that would occur in the future (see "Chiquito Canyon/SR-126 Grading" exhibit). The grading for the debris basins in Chiquito Canyon and the widening of SR-126 combined will involve 1,019,000 cubic yards of raw cut. The net volume (after shrinkage) of 866,000 cubic yards will be placed as fill in accordance with County Ordinance requirements in three designated locations as indicated on the exhibit.

Under the Implementation Procedures of the Newhall Ranch Specific Plan (Section 5.2 g), the "off-site transport of materials" is addressed through the Substantial Conformance process. As such, the following information is required:

- *Name and address of all persons owning all or any part of the property from which such material is proposed to be removed and to which it is proposed to be transported:*

The property owner of the borrow site and fill site is Newhall Land Company. The property owner's mailing address is:
23823 Valencia Boulevard,
Valencia, CA 91355-2194,

- *The names and address of the person or person who will be conducting the operations proposed:*

No grading contractor has been selected by Newhall Land Company.

- *The ultimate use of the property:*

As more fully described in other entitlement applications, Landmark Village is planned as a mixed-use, neo-traditional development.

Section 5.2 d of the Newhall Ranch Specific Plan requires that the Planning Director make the following findings in approving a request for Substantial Conformance:

- *The request substantially conforms with all applicable provisions of the Specific Plan and Los Angeles County ordinances which do not conflict with the Specific Plan.*

The Landmark Village site must be elevated in order to avoid flood issues. Raising the site will occur by importing fill material from the borrow site location. The request to transport material to Landmark Village in order to implement the project is consistent with the mixed-use development planned for Landmark Village as articulated in the Newhall Ranch Specific Plan. By making the site ready for development, the importation of fill will allow Landmark Village to be developed in a manner consistent with all requirements of the Specific Plan (e.g., planned uses, densities, infrastructure, parks, trails, etc.).

The (revised) Specific Plan was approved by the Board of Supervisors in 2003. The proposed grading operation is consistent with planned grading operations as depicted in the Specific Plan [see enclosed exhibit – Figure 1.0-14 (Conceptual Grading Plan)].

- *The request will not adversely affect public health and safety.*

Inasmuch as the borrow site (Adobe Canyon), import site (Landmark Village), grading sites, and transport routes are not located in any inhabitable area, there will be no adverse impacts on the public's health or safety. Before material is physically removed from the borrow site location, a soils engineer will be engaged to ensure that no slope failures will occur due to the removal of material.

- *The request will not adversely affect adjacent property.*

Adjacent property is all owned by Newhall Land Company, so no other property owner would be adversely impacted by the grading operation or transportation of fill material. Even so, there will be an on-site engineer during operations to ensure that grading does not negatively affect Newhall Land Company's adjacent ownership (e.g., causing unanticipated landslides). When the Board of Supervisors approved the (revised) Newhall Ranch Specific Plan in 2003, many grading mitigation measures were adopted that addressed aesthetics, noise, air quality (fugitive dust), re-compaction and stabilization (buttress fills, shear keys) to ensure that no property would be adversely affected.

A. *That the requested use at the location proposed will not:*

1. *Adversely affect the health, peace, comfort or welfare of persons residing or working in the surrounding area.*

Ultimately, the use of the property is the development of the community of Landmark Village. This development requires a net importation of 6 million cubic yards of fill material in order to protect the future inhabitants from potential flooding. The development will also require the grading for the debris basins in Chiquito Canyon, north of SR-126. Along with the grading for the debris basins, it will be necessary to assume the required grading for the widening of SR-126 concurrently so as to not have conflicting grading operations. The grading that is required for the widening of SR-126 is necessary to accommodate the increased traffic capacity that will result from the development of Landmark Village. Therefore, contrary to having an adverse impact, the proposed grading operations will be beneficial to the future residents and businesses at Landmark Village.

The (revised) Specific Plan was approved by the Board of Supervisors in 2003. The proposed grading operation is consistent with planned grading operations as depicted in the Specific Plan (see enclosed exhibit – Figure 1.0-14 (Conceptual Grading Plan)).

Operationally, any potential adverse effects that may arise at the grading sites, borrow site or transport routes will be addressed by incorporating recommendations from the soils engineer that address unstable slope conditions, and flag-men to facilitate truck traffic.

2. *Be materially detrimental to the use, enjoyment or valuation of property of others persons located in the vicinity of the site.*

The grading operations will be temporary in nature. Potential noise and traffic conflicts will be addressed in the Landmark Village environmental impact report, and measures will be proposed to mitigate these impacts. Properties most likely to be impacted – those adjacent to the borrow sites - are owned by the project proponent, Newhall Land Company. The applicant's soils engineer and the County Department of Public Works will ensure that slopes at the borrow sites are engineered for stability and that appropriate erosion control measures are in place.

3. *Jeopardize, endanger or otherwise constitute a menace to the public health, safety or general welfare.*

The off-site transport of fill material necessary for Landmark Village will not be a menace to the community because mitigation measures (e.g., flag-men) will be required to ensure the safe flow of traffic. The placement of the fill material at Landmark Village has been reviewed by the Department of Public Works (DPW) in connection with the review of grading and geotechnical report filed with VTTM No. 53108. DPW is satisfied that there is no danger to the public health, safety or general welfare. That is, grading is consistent with County ordinances and the recommendations and design requirements of County approval of the aforementioned geotechnical report.

When the Board of Supervisors approved the (revised) Newhall Ranch Specific Plan in 2003, many grading mitigation measures were adopted that addressed aesthetics, noise, air quality (fugitive dust), re-compaction and stabilization (buttress fills, shear keys) to ensure that no property would be adversely affected.

- B. *That the proposed site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping and other development features prescribed in this Title 22, or as is otherwise required in order to integrate said use with the uses in the surrounding area.*

The borrow site is adequate in size to allow for the removal and export of fill material without incurring any physical constraints. The location is not for

development purposes and, therefore, there is no issue relative to yards (setbacks), walls, fences, parking and loading facilities. Grading operations sites will conclude with adequate erosion control (to include landscaping) to ensure that the site is not left in a state that would otherwise be unsafe.

The recipient site – Landmark Village – will be in compliance with all the development standards required by the Newhall Ranch Specific Plan.

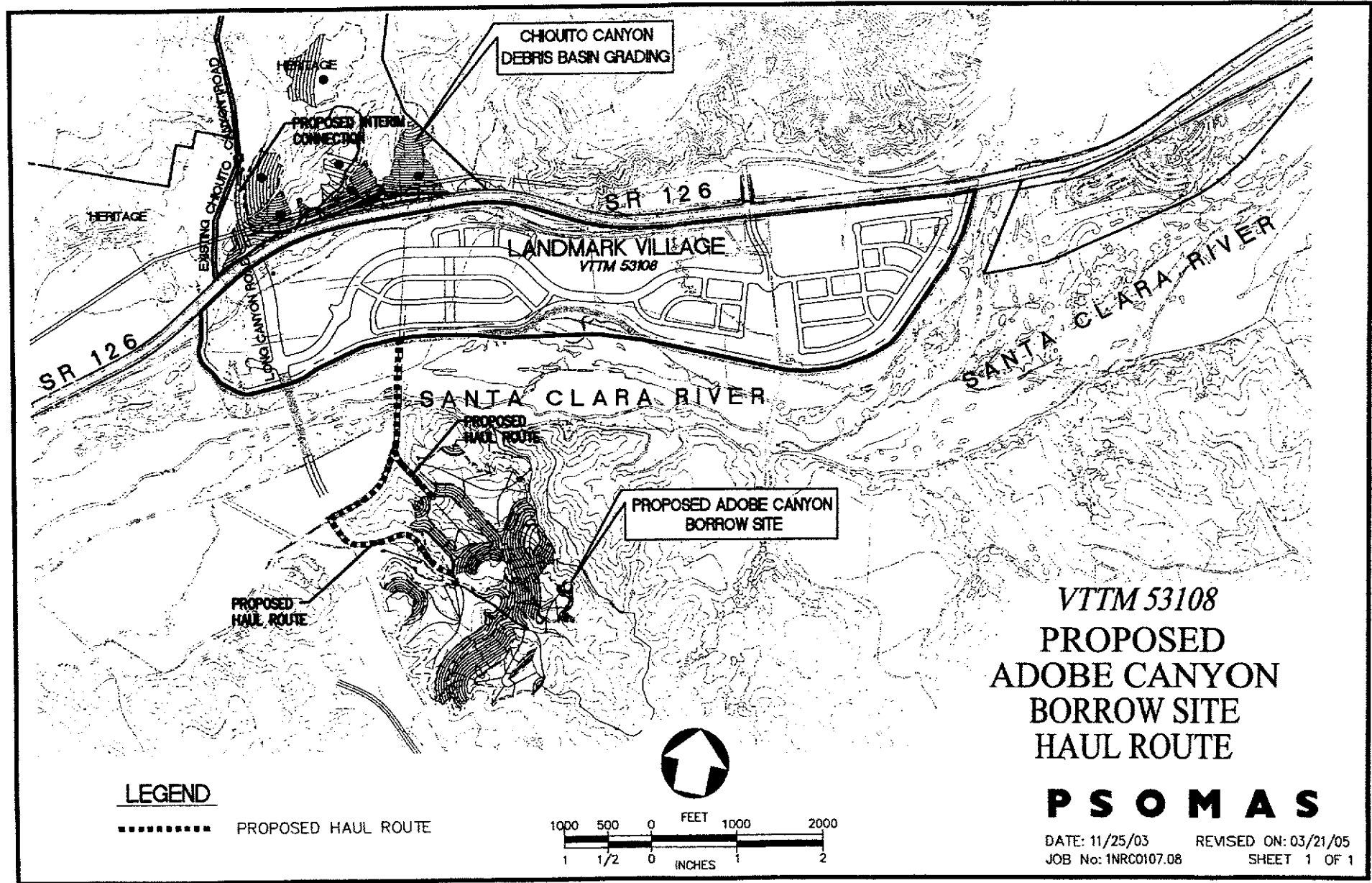
C. That the proposed site is adequately served:

- 1. By highways or streets of sufficient width and improved as necessary to carry the kind and quantity of traffic such use would generate.*

The borrow site will be adequately served by the two haul routes between the proposed Adobe Canyon borrow site and Landmark Village as shown in "Proposed Adobe Canyon Borrow Site Haul Route" exhibit and by the proposed interim connection between SR-126 and existing Chiquito Canyon Road. Landmark Village will have a sufficient circulation network to meet the operational demands of the future community.

- 2. By other public or private service facilities as are required.*

No service facilities are required at the borrow site. Landmark Village will be adequately served by public and/or private facilities. These will include not only traditional infrastructure such as sewers, storm drains, and streets, but also an elementary school, parks, and shopping.



CONDITIONAL USE PERMITS

Burden of Proof Off-site Water Tanks VTM 53108

Background

The proposed project, Landmark Village, is a master planned residential community located within the Newhall Ranch Specific Plan area. The community primarily consists of single-family and multi-family residences (including condominiums, duplexes and apartments), mixed-use/commercial development, parks, and open space. Facilities and infrastructure to support the proposed project consist of roads, trails, drainage improvements and flood protection (including buried bank stabilization within the Santa Clara River), potable and reclaimed water systems - including water tanks - and a sanitary sewer system.

To serve Landmark Village, there are two (2) proposed water tanks for reclaimed water and two (2) tanks for potable water located outside the Landmark Village project boundary (but within the NRSP area). These proposed tanks are subject to conditional use permits per Section 22.24.150 of the Los Angeles County Municipal Code.

The proposed potable and reclaimed water tank system is consistent with, and implements the Newhall Ranch Specific Plan's approved Conceptual Backbone Water Plan (Exhibit 2.5-2 of the Draft EIR). Consistent with the NRSP, the retail potable water will be provided by the Valencia Water Company. The proposed tanks will be located on three separate sites, outside the boundaries depicted on the Landmark Village tentative tract map. The sites have been selected based on the water pressure zones that have been established near the project site. The multiple tank system is necessary to ensure an adequate source of supply and storage to maintain the system's reliability, safety, and efficiency and it also provides for flexibility in the ultimate location of necessary tanks.

Two of the proposed water tanks for reclaimed water are to be located north of Landmark Village in Chiquito Canyon. This location was selected due to its natural elevation and remoteness to the project area. This area will be able to accommodate the two water tanks that would also be able to share water lines. The site would require approximately a one-acre pad to be graded for each tank. The tanks are anticipated to be 32' in height, and 132' in diameter with a capacity of 3 million gallons. The treated water will be pumped from the existing County Water Reclamation Plant (WRP) 32 located near Interstate-5 just south of Highway SR-126. The reclaimed water to be stored in the proposed tanks will be available to the community of Landmark Village and beyond for specified irrigation and firefighting purposes. In addition to the two proposed new tanks, there is a third possible reclaimed water tank location. An existing water tank located near the treatment plant by Interstate-5 just south of Highway SR-126 may be determined to be an appropriate location for the future reclaimed tank. Although it is an existing tank

originally intended for potable water, minor improvements will be necessary in order to upgrade the waterline system that connects to it.

The two water tanks for potable water are proposed to be located north of Landmark Village as well. The first tank is proposed to be located in Chiquito Canyon just south of the two proposed reclaimed water tanks mentioned above. The second tank is proposed to be located west of Commerce Center Drive, just north of an existing potable water tank that currently serves the Valencia Commerce Center located nearby. These locations were selected due to its natural elevation and remoteness to the project area. The tanks will each require approximately a one-acre graded pad area. The tanks are anticipated to be approximately 32' in height and 152' in diameter with a capacity of 4 million gallons.

Findings

A. That the requested use at the location proposed will not:

- 1) Adversely affect the health, peace, comfort or welfare of persons residing or working in the surrounding area, or**
- 2) Be materially detrimental to the use, enjoyment or valuation of property of other persons located in the vicinity of the site, or**
- 3) Jeopardize, endanger or otherwise constitute a menace to the public health, safety or general welfare.**

The proposed water tanks in Landmark Village will not adversely affect the health, peace, comfort or welfare of persons residing or working in the surrounding area. Rather, the proposed water tanks will serve the needs of residents of Landmark Village as well as other surrounding Newhall Ranch developments. The potable water tanks will be able to service the communities with safe and quality drinking water. Even more, the reclaimed water will significantly contribute to water conservation as it will be able to offer treated water for irrigation and firefighting purposes.

The proposed water tanks will not be materially detrimental to the use, enjoyment or valuation of property of other persons located in the vicinity of the site. The two locations for the proposed potable water tanks have been strategically selected to consider a natural elevation that would provide adequate water service in an efficient manner as well as minimize any possible negative impacts from the communities. The locations are located so that they may adequately serve Landmark Village in addition to its surrounding communities. In addition, the proposed site for the second potable water tank located west of Commerce Center Drive already contains an existing water tank that serves the Valencia Commerce Center. The sites for the reclaimed water tanks have also been selected to consider efficiency of service as well as the visual impacts from the residents in the community. The two new reclaimed water tanks are to be located in Chiquito Canyon just north of the proposed potable water tank.

The proposed water tanks will not jeopardize, endanger or otherwise constitute a

menace to the public health, safety or general welfare. Rather, they are necessary for provision of a necessary resource. The potable tanks will provide quality drinking water, a necessary resource and the reclaimed water tanks will assist in potable water conservation by using reclaimed water for irrigation and other purposes.

B. That the proposed site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping and other development features prescribed in this Title 22, or as is otherwise required in order to integrate said use with the uses in the surrounding area.

The three sites for the proposed tanks are adequate in size and shape to accommodate the two water tanks. As mentioned above, the sites have been selected after careful consideration of impacts to neighboring communities as well as taking advantage of the natural elevation that provide for an efficient delivery system minimizing the aid of pumps and other machinery. Each site will require a one-acre graded pad, approximately. The requests for the necessary off-site grading and improvements related to the water tanks have been included in an accompanying request for a conditional use permit. The tanks do not require any parking or loading spaces, although there will be vehicular access to the tanks should any future maintenance be required. The tanks will be hidden from view by a 30-foot berm surrounding them. By sinking the tanks into the landscape and berming the edge, the water tanks will be fully integrated with the surrounding area and have minimal visual impact.

The water tank options have been discussed in the Environmental Impact Report (EIR) and are depicted on the tentative tract map (VTTM) 53108. The proposed project would be developed in conformance with all applicable County Codes including, but not limited to, the Subdivision Code, Grading Code, Building Codes and all required mitigation measures.

C. That the proposed site is adequately served:

- 1) By highways or streets of sufficient width and improved as necessary to carry the kind and quantity of traffic such use would generate, and**
- 2) By other public or private service facilities as are required.**

The three sites will take access from public/private streets. Since two of the three sites – west of Commerce Center Drive and the site near the County WRP 32 – contain existing tanks, minor improvements will be necessary to upgrade access from public/private roads to the graded across for each tank.. The proposed site for the one proposed potable and two proposed reclaimed tanks in Chiquito Canyon will require new construction vehicular access to each of the graded pad areas.

Landmark Village has been designed to be in conformance with the approved the Mobility Plan (Section 2.4) of the Newhall Ranch Specific Plan, which provides for a hierarchy of highways and streets that will provide a safe and efficient circulation system. The residential communities will be directly served by a system of public,

“private and future” streets and private drives, which meet Department of Public Works and Fire Department access criteria.

Highway and street widths and standards will be reviewed and approved by the County's Subdivision Committee, which would specify conditions of approval for the subdivision. In addition, a traffic modeling study will be completed using the methodology and standards specified by Los Angeles County, and utilizing the Los Angeles County/City of Santa Clarita Consolidated Traffic Model. The traffic studies for the project will be incorporated into the Draft EIR. The project would conform to all conditions of approval for VTTM 53108, as well as to all required mitigation measures.

No other public or private services are necessary for the tanks.

Request for OAK TREE PERMIT



Los Angeles County DEPARTMENT OF
320 West Temple Street, Los Angeles, Ca, 90012

Regional Planning

NOTE: It is the applicant's responsibility to notify the Planning Director of any change of the principals involved in this case prior to the completion of processing.

CONCURRENT CASES: _____

VTM 53108 / Oak Tree Permit 00-196

APPLICANT

Name
Newhall Land
Address
23823 Valencia Blvd.
City
Valencia, CA 91355
Telephone
(661) 255-4217

PROPERTY OWNER

Name
Newhall Land
Address
23823 Valencia Blvd.
City
Valencia, CA 91355
Telephone
(661) 255-4217

OWNER'S AUTHORIZATION:

I certify that I am the owner of the herein described property and permit the application to file this request.

Location (i.e. address or general description of location) and legal description of property in question: (use additional sheets as necessary) Generally south of State Route 126 & north of the Santa Clara River.
Legal description: PARCELS 14, 15, 16, 17 OF PARCEL MAP 24500-01 PMB 29.3-34 / 67, RECORDS OF LOS ANGELES COUNTY.

How many oak trees will be cut, removed, relocated, damaged or will have encroachments into their protected zone? 67 will be removed and 14 may be subject to damage. (81 trees total will require an Oak Tree Permit.

How many oak trees will remain? 120

Will trees be replaced? Yes If yes, indicate the proposed size, type, location (indicate on site plan) and schedule planting. Oak trees removed will be replaced by a tree of the same species at a ratio of 2:1.

Schedule of planting is to be determined.

BURDEN OF PROOF

Submit additional sheets describing how the following findings will be satisfied.

- A That the proposed construction or proposed use will be accomplished without endangering the health of the remaining trees subject to this Part 16, if any, on the subject property, and
- B That the removal or relocation of the oak tree(s) proposed will not result in soil erosion through the diversion or increased flow of surface waters which can not be satisfactorily mitigated, and
- C That in addition to the above facts at least one of the following findings apply:
 - 1. That the removal of oak tree(s) proposed is necessary as continued existence at present location(s) frustrates the planned improvement or proposed use of the subject property to such an extent that:
 - a Alternate development plans cannot achieve the same permitted density or that the cost of such alternative would be prohibitive, or
 - b Placement of such tree(s) precludes the reasonable and efficient use of such property for a use otherwise authorized, or
 - 2 That the oak tree(s) proposed for removal or relocation interfere with utility service or streets and highways either within or outside of the subject property and no reasonable alternative to such interference exists other than removal of the tree(s), or
 - 3. That the oak tree(s) proposed for removal, with reference to seriously debilitating disease or danger of falling, is such that it cannot be remedied through reasonable preservation procedures and practice.
 - 4. That the removal of the oak tree(s) proposed will not be contrary to or be in substantial conflict with the intent and purpose of the oak tree permit procedure.

Oak Tree Permit 00-196
Project Description and Burden of Proof
VTTM No. 53108
Landmark Village

In connection with Vesting Tentative Tract Map 53108, an oak tree permit is requested to remove or possibly impact a total of 81 oak trees. There are a total of 201 oak trees within the Landmark Village Planning Area (which includes Landmark Village VTTM 53108, all proposed grading limits and the area within 200 feet of the proposed grading line). Of the total 201 oak trees that were surveyed, 67 trees are proposed to be removed, 14 may be impacted from operations occurring within the protective zone of the tree, and the remaining 120 oak trees will not be impacted.

The following matrix summarizes the number, location and proposed action for each tree:

Oak Tree Survey Matrix

Landmark Village				
	Removed	Impacted	No Impacts	Total
Heritage Oaks	10	3	15	28
Non-Heritage Oaks	57	11	105	173
Total	67	14	120	201

- A. That the proposed construction or proposed use will be accomplished without endangering the health of the remaining trees subject to this Part 16, if any, on the subject property.

Implementation of Vesting Tentative Tract Map No. 53108 will not endanger the health of the 120 remaining oak trees (15 of which are heritage oak trees) located within the Landmark Village Planning Area. Mitigation measures and preservation guidelines have been established for the 14 oak trees proposed to be subject to temporary impacts, as well as for the 120 trees that will remain (e.g. fencing).

The applicant proposes to preserve and protect the remaining 120 oak trees within the impacted area. Protective fencing will be provided and placed at the limits of the protective zone for individual or group of oak trees within the Landmark Village Planning Area. This protective measure will remain in place until construction is completed. To ensure full protection of the health of these trees, no encroachment will occur within the protected zones per §22.56.2060 of Los Angeles County Code.

In addition, equipment damage to any parts of the remaining trees shall be avoided during project construction and development. No storage, dumping or temporary structures shall be permitted within the protective zone of any remaining oak tree.

- B. That the removal or relocation of the oak tree(s) proposed will not result in soil erosion through the diversion or increased flow of surface waters which can not be satisfactorily mitigated.

The proposed removal of 67 oak trees and the impact to 14 oak trees will not result in any additional soil erosion through diversion or increased flow of surface waters, which cannot be satisfactorily mitigated through on-site drainage control measures that shall be implemented with the project.

The proposed project incorporates the Landmark Village drainage and water quality plan which is designed to both protect development and control the drainage and pollutants. The features of this plan are intended to blend into the community as an extension of the landscaping. All drainage entering and originating within the project area will be collected and controlled by the constructed drainage system to ensure no increase in site erosion.

Any grading that will occur beyond the actual tract map border in association with grading to yield import material for the development will follow the recommendations of the soils engineer to avoid soil erosion.

- C. That in addition to the above facts at least one of the following findings apply:
- 1) That the removal of oak tree(s) proposed is necessary as continued existence at present location(s) frustrates the planned improvement or proposed use of the subject property to such an extent that:
 - a. Alternate development plans cannot achieve the same permitted density or that the cost of such alternative would be prohibitive and,
 - b. Placement of such tree(s) precludes the reasonable and efficient use of such property for a use otherwise authorized.

Most of the trees proposed for removal and to be impacted are located in areas where fill will be taken for importation to Landmark Village. The project applicant identified these sites as a source of fill material because the impacts to oak trees were less than alternative locations.

- 2) That the oak tree(s) proposed for removal or relocation interfere with utility service or streets and highways either within or outside of the subject property and no reasonable alternative to such interference exists other than removal of the tree(s).

Not applicable.

- 3) That the oak tree(s) proposed for removal, with reference to seriously debilitating disease or danger of falling, is such that it cannot be remedied through reasonable preservation procedures and practice.

Not applicable.

- 4) That the removal of the oak tree(s) proposed will not be contrary to or be in substantial conflict with the intent and purpose of the oak tree permit procedure.

The proposed removal of 67 trees and impact to 14 trees will not be contrary to, or be in substantial conflict with, the intent and purpose of the oak tree permit procedure as mitigation measures will be implemented to offset the removals. The grading required for geotechnical stability, access and site balance is necessary to develop the property in the most efficient manner. Without the grading and fill import, the site cannot be developed to the density permitted by the Newhall Ranch Specific Plan. No reasonable alternative to such interference exists other than the removal of the trees.

The applicant has taken great care in identifying export sites to minimize the number of trees which need to be removed in the development process. The applicant recognizes the significance of oak trees as historical, aesthetic and ecological resources that enhance the value of property and character of the communities in which they exist.

The applicant is committed to maintaining the healthy condition of all oak trees to be retained. For each tree removed, a minimum of two (2), 15-gallon replacement trees will be planted, resulting in a greater number of oak trees on site. These replacement trees shall be located at areas consistent with the proposed design plan and as directed by the County Forester. The project proposes to provide several areas designated for tree replacement.

Landmark Village Oak Tree Report

The Landmark Village Planning Area Oak Tree Report Los Angeles County, California

Prepared for:

The Newhall Land and Farming Company
23823 Valencia Boulevard
Valencia, California 91355

Prepared by:

Impact Sciences, Inc.
803 Camarillo Springs Road, Suite A
Camarillo, California 93012
(805) 437-1900

September 2006

1.0 EXECUTIVE SUMMARY

➤ Total Number of Ordinance-Size Oak Trees Surveyed	201
➤ Total Number of Oak Trees Planned for Removal	67
➤ Total Number of Oak Trees That May be Encroached Within the Protective Zone	14
➤ Total Number of Oak Trees That Would Not be Removed or Encroached, but Occur within 200 Feet from Grading Limit Line	120
➤ Total Number of Oak Trees That Would Require a Los Angeles County Oak Tree Permit (Removed + Encroached)	81

All oak trees surveyed within the Landmark Village Planning Area are displayed on attached engineering plans prepared by Psomas Engineering (Sheets 1, 2, and 3) and an aerial photograph showing the limits of the Orion Field Bank Stabilization prepared by Impact Sciences. All exhibits show oak trees occurring within the proposed grading limits and within 200 feet of the grading limit line. Table 2 on page 14 of this report lists the type of project-related impact that may occur to each oak tree, and identifies on which sheet each tree is located.

2.0 INTRODUCTION

Pursuant to the Los Angeles County Oak Tree Ordinance, removal or damage of any tree of the oak genus (*Quercus*) that is 25 inches in circumference (8 inches in diameter), or has a combined trunk circumference of any two trunks of at least 38 inches (12 inches in diameter), as measured 4.5 feet above the mean natural grade (i.e., diameter at breast height [dbh]), is unlawful without a permit (Ordinance 88-0157 1, 82-0168 2, Section 22.56.2050, 1988). Damage is defined as any act causing or tending to cause injury to the root system or other parts of an oak tree, including, but not limited to, burning, application of toxic substances, operation of equipment or machinery, paving, changing of natural grade, and trenching or excavating (i.e., encroached) within the protective zone (the area within the dripline of an oak tree and extending therefrom to a point at least 5 feet outside the dripline, or 15 feet from the trunk[s] of a tree, whichever distance is greater) of an oak tree.

2.1 Purpose

As required by the County of Los Angeles and pursuant to Section 22.56.2090 of the Los Angeles County Code, the purpose of this oak tree report is to provide information to the County on oak trees that may be removed or damaged by the development of the Landmark Village Planning Area. The parameters used to evaluate each tree that was surveyed are described on the following pages under heading 2.0, METHODS. A spreadsheet showing data collected for each oak tree surveyed is provided in Appendix A.

Offsite Improvements
Vesting Tentative Tract Map 53105
(Newhall Ranch - Landmark Village)

1. Los Angeles County Sanitation District trunk sewer located westerly to connect with Newhall Ranch Water Reclamation Plant
2. Water main extension to Valencia Water Company storage tanks and existing pipe system
3. Sewer force main easterly to Los Angeles County Sanitation District 32 Water Reclamation Plant
4. Borrow site in Adobe Canyon in order to import earth per Conditional Use Permit 200500112
5. Pedestrian Bridge located at SR-126 (northwest of project)
6. Debris Basin north of SR-126 located in Chiquito Canyon

Note: Specific details of offsite improvements may be found in the applications, Planner's Notebook or Newhall Ranch Specific Plan.

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MEMORANDUM

TO: Newhall Ranch Specific Plan Project File
FROM: James E. Hartl, AICP, Director of Planning
SUBJECT: Substantial Conformance Interpretation Pertaining to Alternate Street Sections
DATE: (____)

Approved: _____
 Initial Date

Background

Section 2.4 (Mobility Plan) of the Newhall Ranch Specific Plan addresses the required street cross-sections for the hierarchy of the Newhall Ranch roadway system. Specifically, Section 2.4 requires that local street cross-sections shall be consistent with Chapter 21 of the County Subdivision Code, and that collector street cross-sections be consistent with Exhibit 2.4-4 of the Specific Plan.

Specific Issue: Alternate Street Sections in Landmark Village

Within Landmark Village, Newhall Land Company proposes to create a neo-traditional development (TND). Unlike more conventional subdivisions, TND communities reflect a return to traditional neighborhoods that pervaded the urban landscape prior to World War II, and before new suburban developments became automobile dependent.

TNDs are designed for walkability and mixed-use, and they typically have a main street, rectangular street grid section, and common open space. Because TNDs stress pedestrian orientation over automobile usage, the streets in these communities are narrower in width than conventional subdivisions and have other traffic calming features (e.g., chokers, neck-downs, traffic circles, speed tables).

In order to implement the TND street design criteria, beginning in 2000, Newhall Land Company began a dialogue with representatives of the Regional Planning Department, Public Works Department and Fire Department to ensure that the proposed alternative street cross-section design for the low-volume local streets and Landmark Village's one collector street ("A" Street) would continue to meet the needs of these departments, particularly as the proposed design related to traffic capacity and life/safety issues. In the ensuing period of time, a number of meetings have occurred, and an agreement between Newhall Land Company and the aforementioned County departments has been reached

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with is reflected in the alternative local street and collector street cross-sections which are illustrated as an attachment to this memorandum.

Conclusion

Under the provisions of Substantial Conformance (Section 5.2) of the Newhall Ranch Specific Plan, "Adjustments to the plans contained in Chapter 2, Development Plan, such as the Master Circulation Plan, any of the roadway sections (emphasis added), the Master Trails Plan, any of the trails sections, the Conceptual Backbone Water, Sewer, and Drainage Plans the Conceptual Grading Plan, or the Recreation/Open Area Plan which do not change the requirements of providing adequate infrastructure"...are eligible for the Substantial Conformance entitlement process.

Inasmuch as the affected County departments have concluded that the alternative street sections are comparable to those street sections that would otherwise be required by the Specific Plan, or by reference the County Subdivision Code, as the Planning Director, I have determined, pursuant to Section 5.2.d of the Newhall Ranch Specific Plan that:

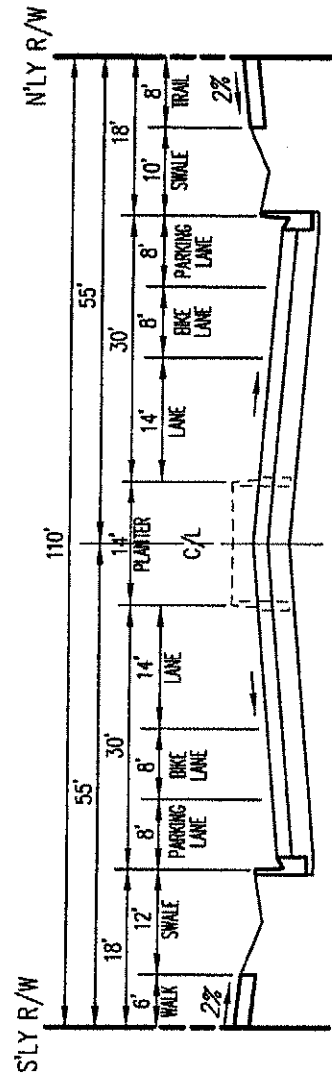
- (1) The proposed alternative street sections substantially conform with all applicable provisions of the Specific Plan and the County ordinances which do not conflict with the Specific Plan, and
- (2) The proposed sections will not adversely affect public health and safety and will not adversely affect adjacent property.

The abovementioned determination shall be applicable to Landmark Village only.

Enclosures: (1) Alternative (proposed) street cross sections
 (2) Memorandum summarizing the agreement with the Fire Department
 and the Department of Public Works

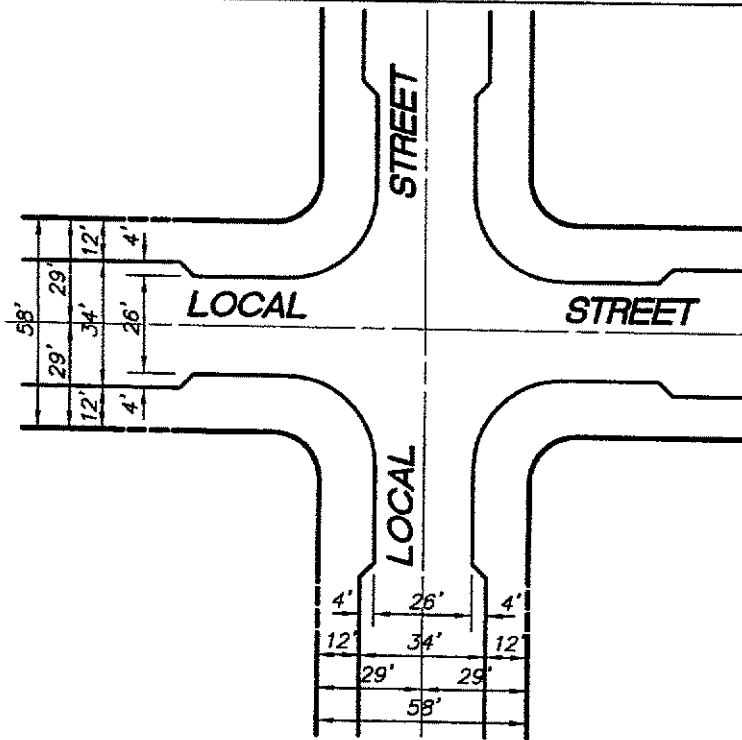
TYPICAL LOCAL STREET SECTION (58' R/W)

Local Access - 30 MPH Design Speed

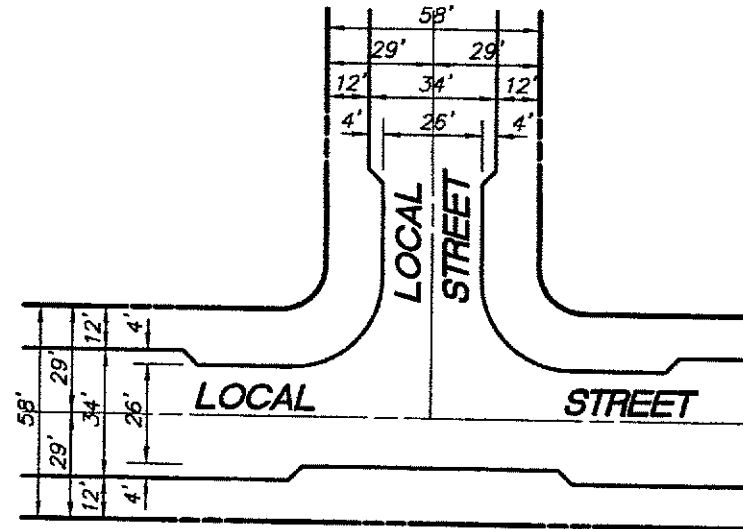


TYPICAL STREET SECTION (110' R/W)

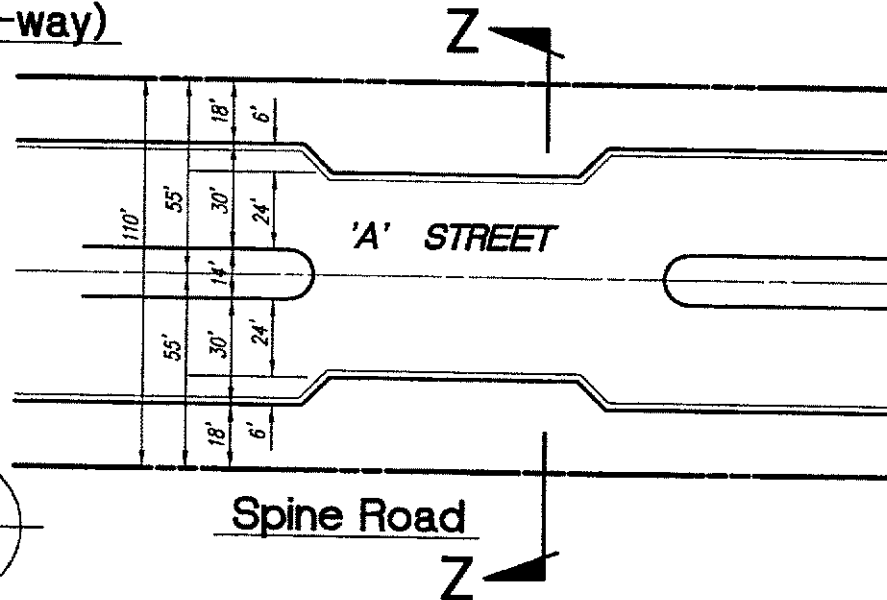
"A" STREET (Spine Road Collector)
From 1st Roundabout to Wolcott Road
Local Access - 45 MPH Design Speed



Local Street Intersection (4-way)



Local Street Intersection (3-way)



TYPICAL DETAIL

NOT TO SCALE

6
1

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MEMORANDUM

TO: Newhall Ranch Specific Plan Project File
FROM: Bruce McClendon FAICP, Director of Planning
SUBJECT: Substantial Conformance Interpretation Pertaining to Shared Parking
DATE: January 23, 2007

Approved: _____
 Initial *Date*

Background

Section 3.7 (Parking Regulations) of the Newhall Ranch Specific Plan specifies the regulations which govern motor vehicle parking. These regulations require parking facilities of sufficient capacity to discourage traffic congestion and provide safe and convenient facilities for motorists and pedestrians. Section 3.7 (3) (a) and (b) describe the provisions for Joint Use and Shared Parking Plan and Senior Community and/or Handicapped Parking Plans.

Specific Issue: Interpretation of the provisions of Section 3.7 pertaining to shared parking to include off-site and reciprocal parking

Off-Site, Reciprocal Parking

Development within the boundaries of the Specific Plan will include a variety of multi-family residential units expected to be designed to incorporate parking to serve residents and guests in convenient locations. The specific design may show parking which is not located on the same lot as the residential unit it serves, but instead on an adjacent lot or in a nearby parking structure or lot.

Development within the boundaries of the Specific Plan will also include commercial development designed in a variety of ways. Commercial development is anticipated to include mixed use areas, commercial centers and individual commercial lots. The specific design for the commercial uses may depict parking on adjacent lots or within parking structures.

Allowing flexibility in parking location will result in the conservation of land and promotion of efficient land use and provide convenience for future residents and patrons.

Parking Program

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Section 3.7 of the Specific Plan establishes regulations for the preparation of a Parking Program to provide an alternative to standard parking requirements. Provisions for enforcement of parking requirements and reciprocal agreements for ensuring off-site reciprocal parking be permanently maintained would be included in the Parking Program to be approved prior to the issuance of building permits.

Conclusion

Under the provisions of Substantial Conformance (Section 5.2) of the Newhall Ranch Specific Plan, "approval of a parking program, pursuant to Section 3.7 of paragraph 3" is eligible for the Substantial Conformance review process.

Inasmuch as the requested interpretation of shared parking is consistent with the provisions found in Title 22 for approval of a parking permit and as the approval of a parking program will provide the same assurances as conditions of approval typically applied to parking permits, as the Planning Director, I have determined, pursuant to Section 5.2.d of the Newhall Ranch Specific Plan that:

- (1) The interpretation of shared parking is applicable to off-site and reciprocal parking designs and substantially conforms with all applicable provisions of the Specific Plan and the County ordinances which do not conflict with the Specific Plan, and
- (2) The interpretation of shared parking will not adversely affect public health and safety and will not adversely affect adjacent property.

The abovementioned determination shall be applicable to development within the boundaries of the Specific Plan.

DRAFT

MEMORANDUM

TO: Newhall Ranch Specific Plan Project File
County of Los Angeles

FROM: James E. Hartl, AICP, Director of Planning

SUBJECT: Substantial Conformance Interpretation pertaining only to
Front Setback for Single-Family Residences
Newhall Ranch Specific Plan Area

DATE: September 23, 2003

Approved: _____
 Initial *Date*

Background

As Newhall Ranch Company is proceeding with design of its initial Tract Map, an interpretation issue relative to setbacks has arisen and they have requested early input as it is fundamental to their planning and lotting. Although the Specific Plan is the broad governing document for the implementation of specific Tract Map level details, much is left to the Planning Director's discretion in interpreting the intent of the Plan's development standards, and allowing for progressive product innovation.

Specific Issue: Front Setbacks for Single-Family Detached Homes in Low (L), Low Medium (LM), and Medium (M)

Front Yard Setbacks

The Newhall Ranch Development Standards are set forth on Table 3.4-1 of the Specific Plan (see attached). The intent of the required minimum 18-foot front yard setback is to avoid blocking of sidewalks by vehicles parked in driveways. (The Specific Plan requires 18-foot garage setback for front entry garage and 10-foot garage setback for side entry garages.)

Consistent with this intent is a standard 10-foot main structure front yard setback and a variable garage setback per the individual conditions set forth below:

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Front Entry and Side Entry Garage Setbacks

The Specific Plan is explicit in requiring an 18-foot minimum front setback for a conventional front entry garage (see Note 4 on Site Development Standards Matrix, Table 3.4-1) and requiring a 10-foot minimum front setback for a side entry garage. Exhibits 'A' and 'B' respectively demonstrate those front setbacks specified by the Specific Plan for Low, Low Medium, and Medium detached residences.

The Specific Plan is silent, however, on front yard setbacks for detached residential products featuring recessed garages and alley-loaded garages.

Recessed Garage Setbacks

Since the 18-foot front yard setback was intended to provide an adequate area for parking a vehicle in the driveway access to a garage in order to prevent the blocking of the sidewalk, it seems logical that the 18-foot setback should be applied to all front loading garages (flush conventional or recessed). Exhibit 'C' demonstrates this type product. Note that to de-emphasize the garage door, only the garage structure is subject to the 18-foot setback and the living area may remain at the 10-foot front yard setback as required by the Specific Plan. This encourages port cochere type products which improve the streetscape.

Alley Loaded Garage Setbacks

Due to the fact that no blockage of the sidewalk is in question the intent of the Specific Plan is clear that the front yard setback should be 10-feet in this case (see Exhibit 'D'). Although a rear yard setback is not required for garages with alley access, a minimum distance of 26 feet is required between the garage entrance and the opposite side of the alley.

Site Development Standards Matrix

The attached Table 3.4-1 Site Development Standards Matrix (Revised) has been amended by adjusting the matrix and notes to include the clarifications to front setbacks as discussed and demonstrated above. Namely, a 10-foot minimum front yard setback for the main structure and a garage setback determined by product type which is set forth in Notes to Table 3.4-1.

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Conclusion

Under the provisions of Substantial Conformance (Section 5.2) of the Newhall Ranch Specific Plan, "modification of development standards contained in Table 3.4 (Site Development Standards)" are eligible for the Substantial Conformance review process.

Inasmuch as this analysis has described the instances where interpretation of the front setback requirement as it pertains to recessed and alley-loaded garages clarifies the intent of the Specific Plan and will facilitate the processing of individual Tentative Tract Maps and is in conformance with the intent of the Specific Plan, as the Planning Director, I have determined, pursuant to Section 5.2.d of the Newhall Ranch Specific Plan that:

- (1) The proposed front setbacks for single family detached homes in Low (L), Low Medium (LM) and Medium (M) designations substantially conform with all applicable provisions of the Specific Plan and the County ordinances which do not conflict with the Specific Plan, and
- (2) The proposed setbacks will not adversely affect public health and safety and will not adversely affect adjacent property.

DRAFT

DEVELOPMENT REGULATIONS

3.4 SITE DEVELOPMENT STANDARDS

TABLE 3.4-1
REVISED SITE DEVELOPMENT STANDARDS MATRIX
Newhall Ranch Specific Plan

RESIDENTIAL SITE DEVELOPMENT STANDARDS						
LAND USE DESIGNATIONS ¹		MINIMUM LOT AREA (Sq. Ft.)	REQUIRED SETBACKS ^{2, 17}			MAXIMUM BUILDING HEIGHTS ²
			Front Yard ² (Main Structure)	Side Yard ² (Each Side)	Rear Yard ²	
ESTATE (E)		20,000	30' Min ²	15' Min	30' Min	35'
LOW RESIDENTIAL (L)		7,500	18' Min ⁴	5' Min ¹¹	20' Min ^{6, 7}	35'
LOW-MEDIUM RESIDENTIAL (LM)	Detached	2,500	18' Min ^{4, 14}	5' Min ^{6, 8, 11, 15, 16}	10' Min ^{6, 7}	35'
	Attached	2,500	18' Min ^{4, 14}	0 ^{9, 11, 15, 16}	10' Min ^{6, 7}	35'
MEDIUM RESIDENTIAL (M)	Detached	2,500	18' Min ^{4, 14}	5' Min ^{6, 8, 11, 15, 16}	10' Min ^{6, 7}	45'
	Attached	N/A	10' Min ¹⁴	0 ^{9, 11, 15, 16}	10' Min ^{6, 7}	45'
HIGH RESIDENTIAL (H) AND MIXED-USE (MU) RESIDENTIAL		N/A	10' Min	0 ^{9, 11}	10' Min ^{6, 7}	55'

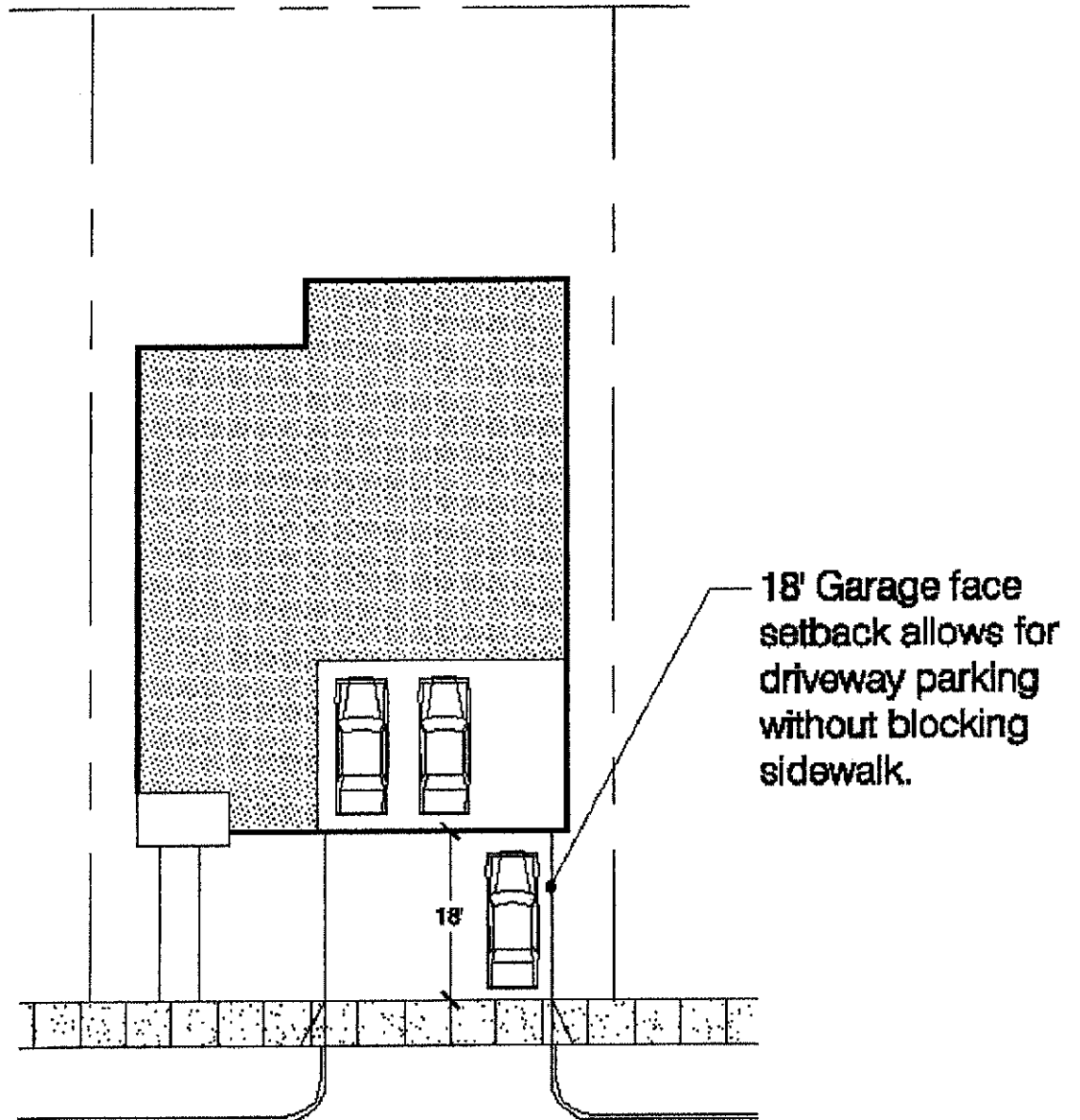
NON-RESIDENTIAL SITE DEVELOPMENT STANDARDS			
LAND USE DESIGNATIONS ¹	LOT REQUIREMENTS ¹²		MAXIMUM BUILDING HEIGHT ²
	Maximum Site Coverage ¹⁰	Minimum Front Setback	
MIXED-USE (MU) COMMERCIAL	No Max	No Min ¹³	55'
COMMERCIAL (C)	50%	20'	45'
BUSINESS PARK (BP)	50%	20'	45'
VISITOR SERVING (VS)	50%	20'	35'

MAJOR OPEN AREAS SITE DEVELOPMENT STANDARDS		
LAND USE DESIGNATIONS ¹	REQUIRED MINIMUM SETBACKS FROM PROPERTY LINE	MAXIMUM BUILDING HEIGHT ²
OPEN AREA (OA)	50'	35'
RIVER CORRIDOR SPECIAL MANAGEMENT AREA (RC)	50'	25'
HIGH COUNTRY SPECIAL MANAGEMENT AREA (HC)	50'	25'

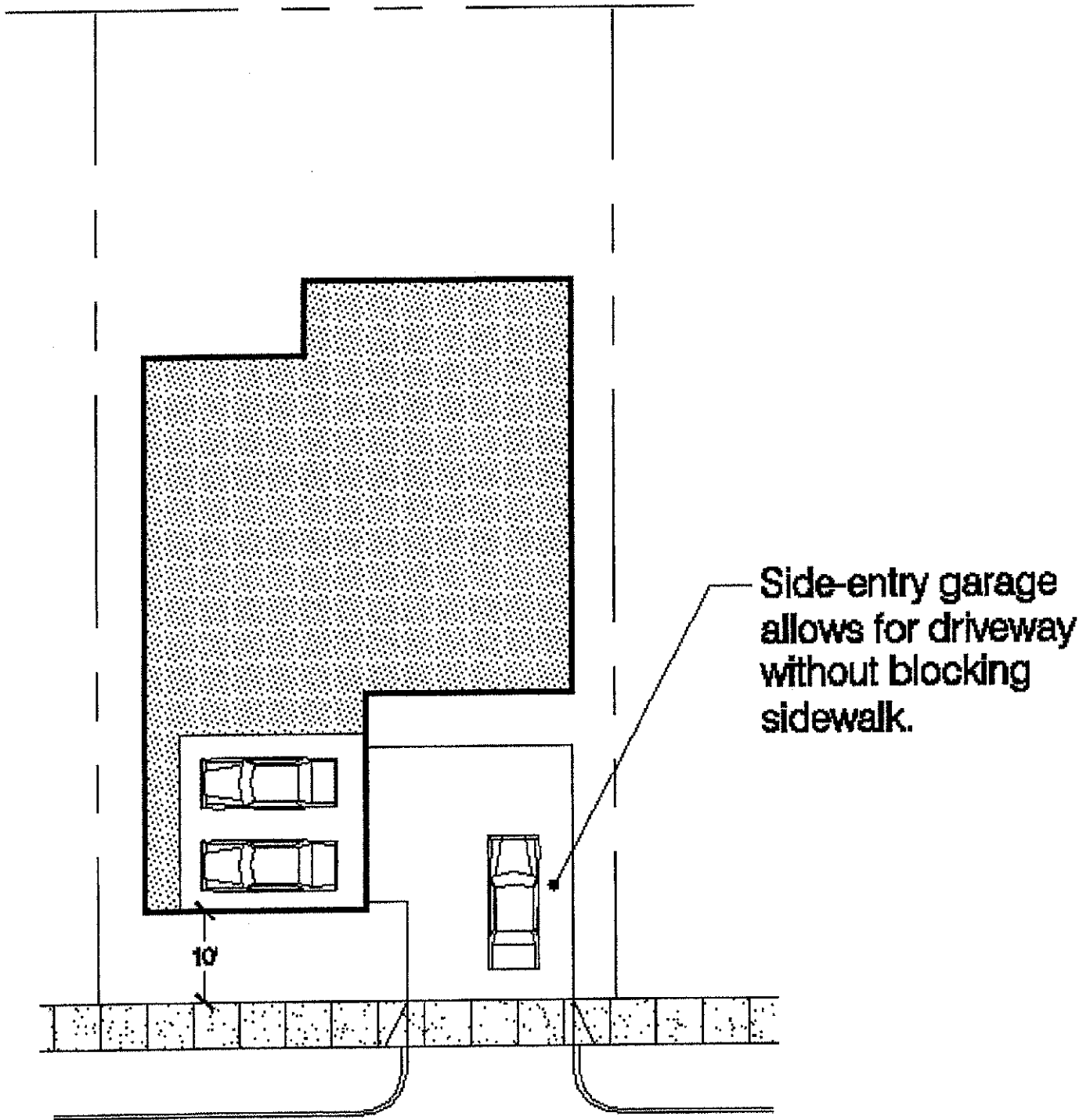
NOTES

- ¹ Other uses including land use overlays such as schools, churches, park facilities, non-residential public or private facilities, and residential/commercial conversions are subject to the site development standards of the land use designation in which they are found.
- ² A defined term — see glossary definition and/or related exhibit for full description of requirement.
- ³ Front Entry Garage: 30' min.
Side Entry Garage: 15' min.
- ⁴ Front Entry Garage: 18' min.
Side Entry Garage: 10' min.
- ⁵ Zero Side Yard Lot configuration is permitted.
- ⁶ Except where there is a detached Second Unit structure, and/or garage, where 5' minimum setback is allowed from the structure.
- ⁷ No garage setback requirement for alley access.
- ⁸ 10' minimum aggregate for two adjacent lots (e.g., 5' and 5', or 8' and 2', or 0 and 10').
- ⁹ 10' minimum building to building separation.
- ¹⁰ A minimum of 10 percent of the lot area excluding required parking shall be landscaped.
- ¹¹ 10' minimum adjacent to public street.
- ¹² 20' minimum side and rear yard setback is required when building is adjacent to a different land use designation or a public road.
- ¹³ 20' minimum is required when building fronts on a public road.
- ¹⁴ 15' minimum for clustered single-family detached and attached buildings.
- ¹⁵ 5' minimum for clustered single-family detached and attached buildings when one side of two adjacent buildings has no windows.
- ¹⁶ 12' minimum for clustered single-family detached and attached buildings when kitchen/family area faces toward zero lot line building with no windows.
- ¹⁷ If at the time building permits are issued, the County's setback standards in place at that time are more stringent than those contained in the Site Development Standards Matrix, the more stringent standards shall apply.

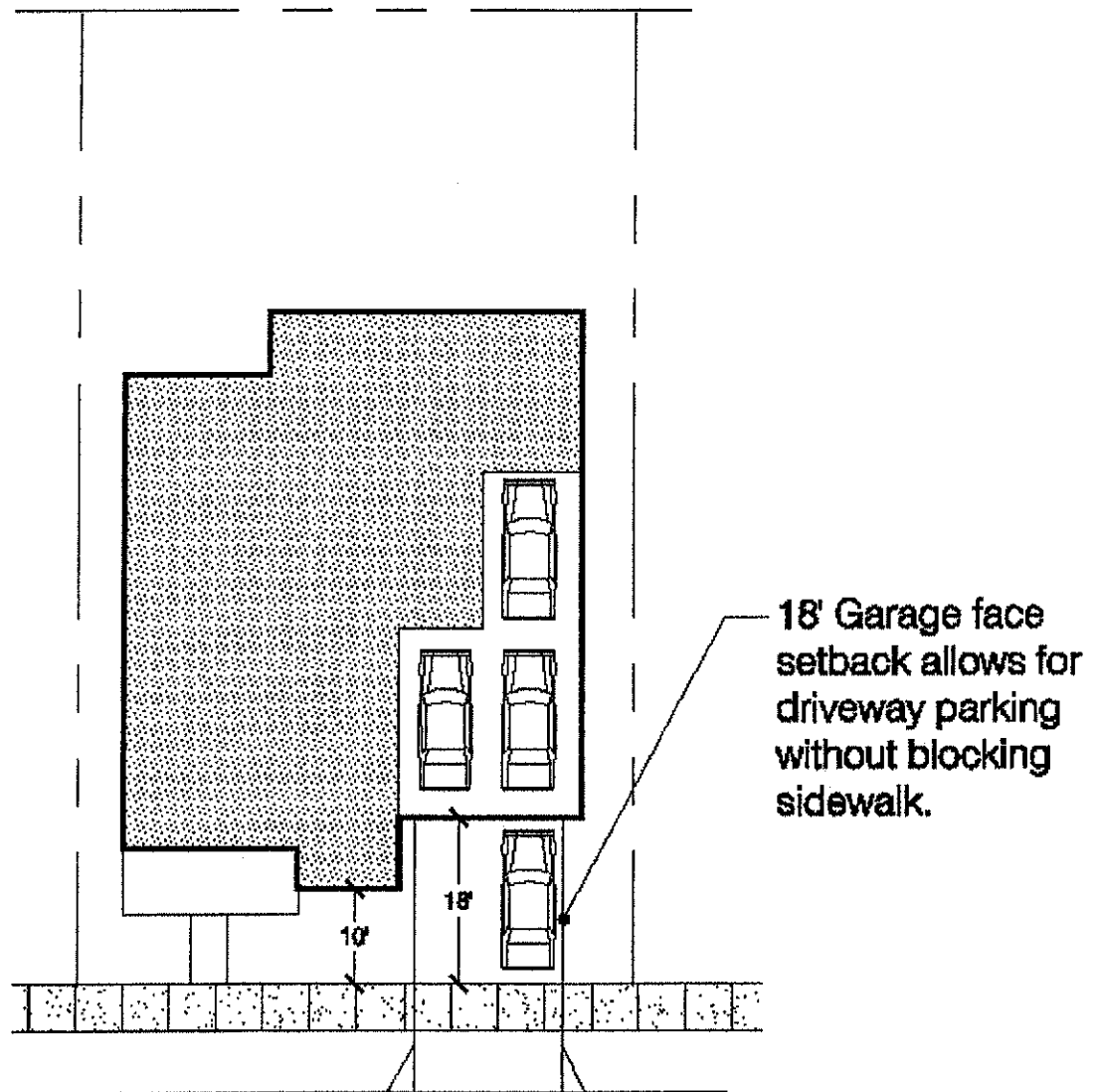
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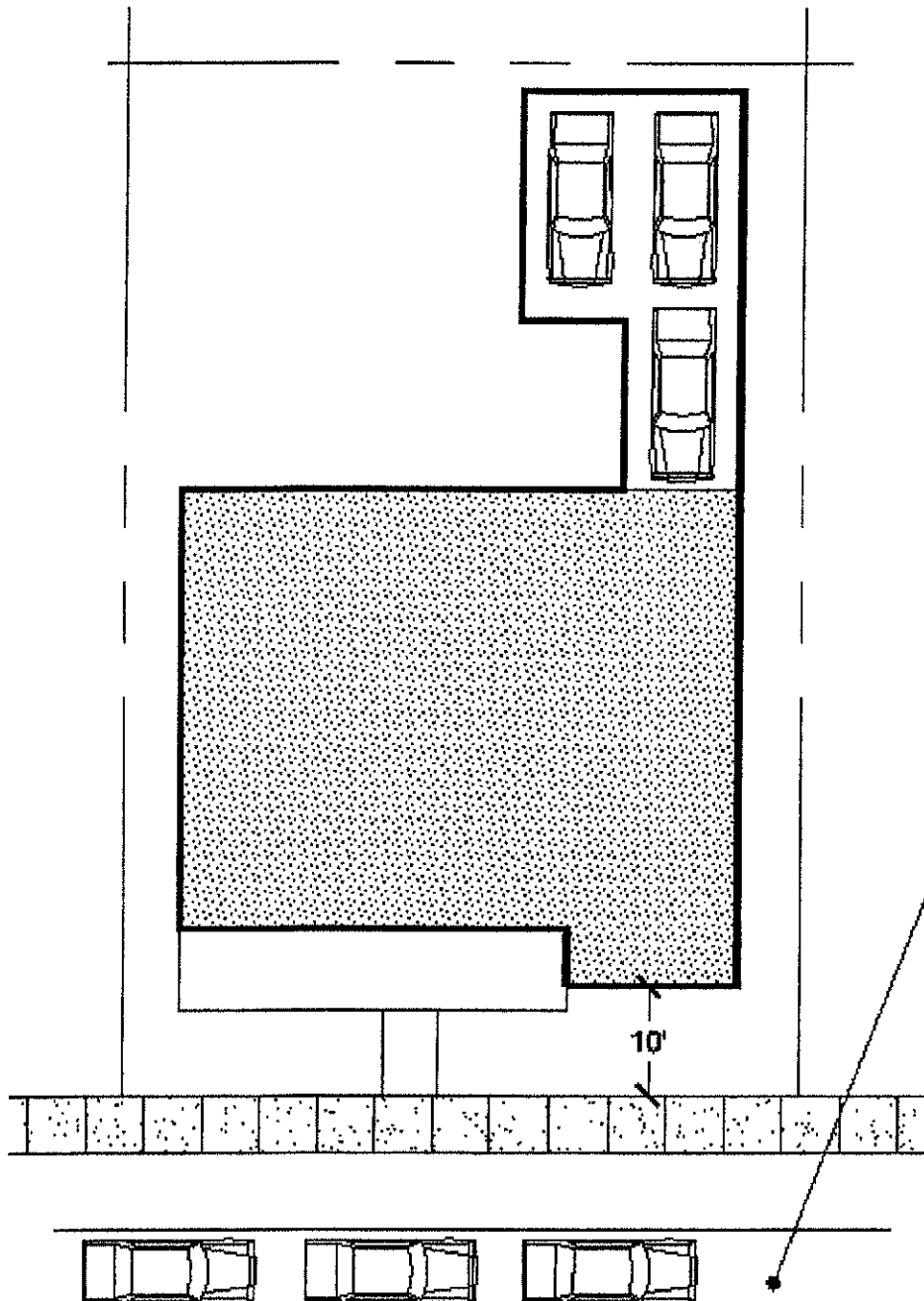
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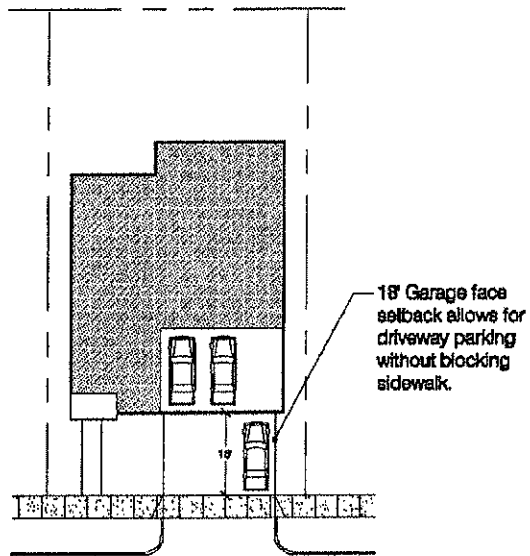


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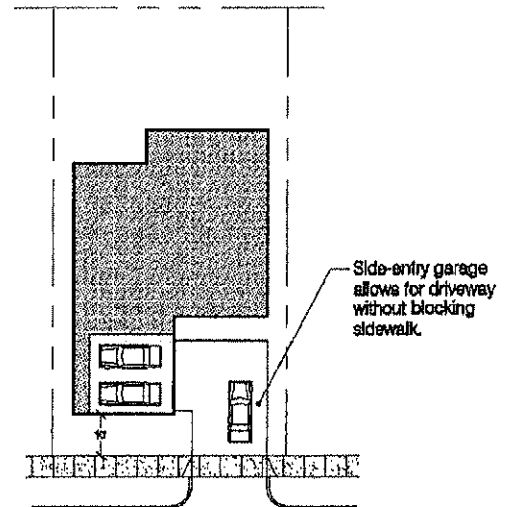


Driveway parking
replaced by
increased street
parking due to
lack of curb cuts.

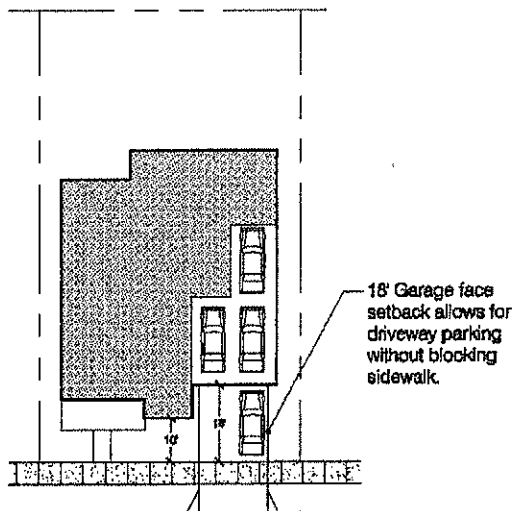
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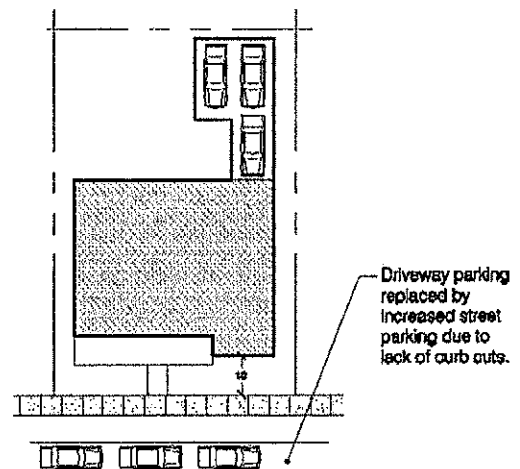
Conventional Front Entry Garage



Side Entry Garage



Recessed Front-Loading Garage



Alley-Loaded Garage

~~DRAFT~~

MEMORANDUM

TO: Newhall Ranch Specific Plan Project File

FROM: Bruce McClendon, FAICP, Director of Planning

SUBJECT: Substantial Conformance Interpretation Pertaining to Off-Site Transport of Materials in Conjunction with Permitted Grading Projects and Conformance with Grading and Hillside Management Guidelines

DATE: ()

Approved: _____
 Initial Date

Background

Section 5.2(Implementation Procedures) of the Newhall Ranch Specific Plan provides for a determination of substantial conformance for transport of materials within the boundaries of the Specific Plan in conjunction with a permitted grading operation and also for determination of conformance with grading and hillside management guidelines for subdivisions having an average slope of 25% or greater in those areas to be graded .

Specific Issue: Transport of Grading Materials from the identified borrow site of Adobe Canyon to Landmark Village and Determination of Conformance with Grading and Hillside Management Criteria.

In order to implement the development of Landmark Village it will be necessary to import fill material from Adobe Canyon to elevate the site and avoid flooding issues. Newhall Land Company will need a net import of 6 million cubic yards of fill material from the identified Adobe Canyon borrow site.

There are two proposed haul routes for exporting the fill material from Adobe Canyon. The two haul routes would then merge onto an existing agricultural crossing that would cross the Santa Clara River and enter Landmark Village. The first proposed haul route begins toward the center of the borrow site and travels west to the existing agricultural crossing. The second proposed haul route begins in the northwest corner of the borrow site and merges on to the existing agricultural crossing, which then heads north into Landmark Village.

The grading operations in Adobe Canyon and Landmark Village have been designed to minimize impacts to the extent feasible. Oak trees which are removed by grading operations will be mitigated. Any erosion control requirements will be met and significant ridgelines are not impacted.

Conclusion

Under the provisions of Substantial Conformance (Section 5.2) of the Newhall Ranch Specific Plan, "subdivisions having an average slope of 25% or greater in those areas to be graded for determination of conformance as to grading and hillside guidelines and approval of transport materials within the boundaries of the Specific Plan"...are eligible for the Substantial Conformance entitlement process.

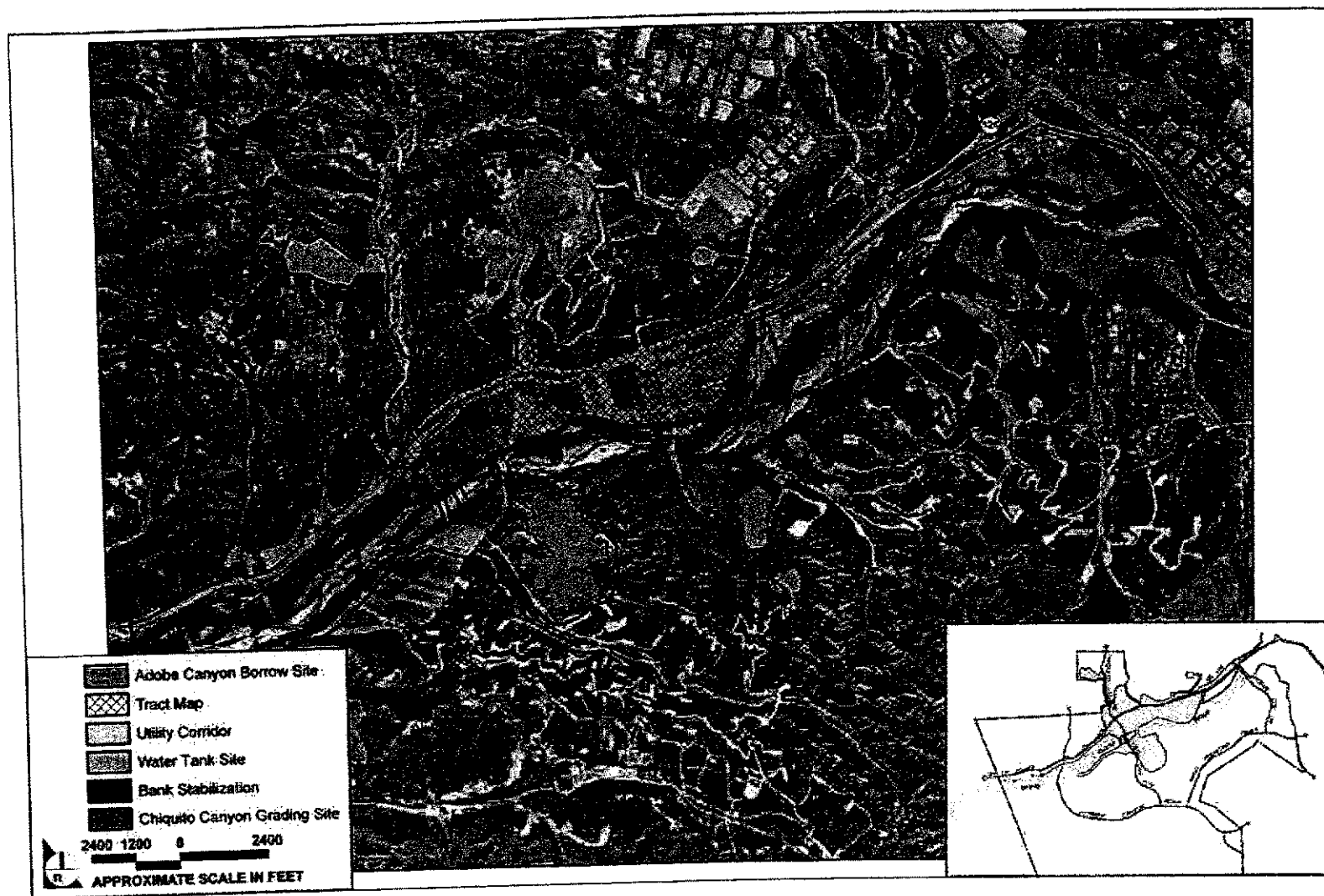
Inasmuch as the grading operations have been designed to minimize impacts to the extent feasible and that the transport routes for hauling of grading materials from the Adobe Canyon borrow site to Landmark Village follow existing agricultural roads to limit impacts to the Santa Clara River, as the Planning Director, I have determined, pursuant to Section 5.2.d of the Newhall Ranch Specific Plan that:

- (1) The proposed haul routes to transport grading materials from Adobe Canyon to Landmark Village are in substantial conformance with all applicable provisions of the Specific Plan and the County ordinances which do not conflict with the Specific Plan, grading has been designed to minimize impacts; and
- (2) The proposed haul routes and grading operations which are not located near existing residences or occupied properties will not adversely affect public health and safety and will not adversely affect adjacent property.

The abovementioned determination shall be applicable to Landmark Village only.

Enclosures: (1) Haul Route Exhibits

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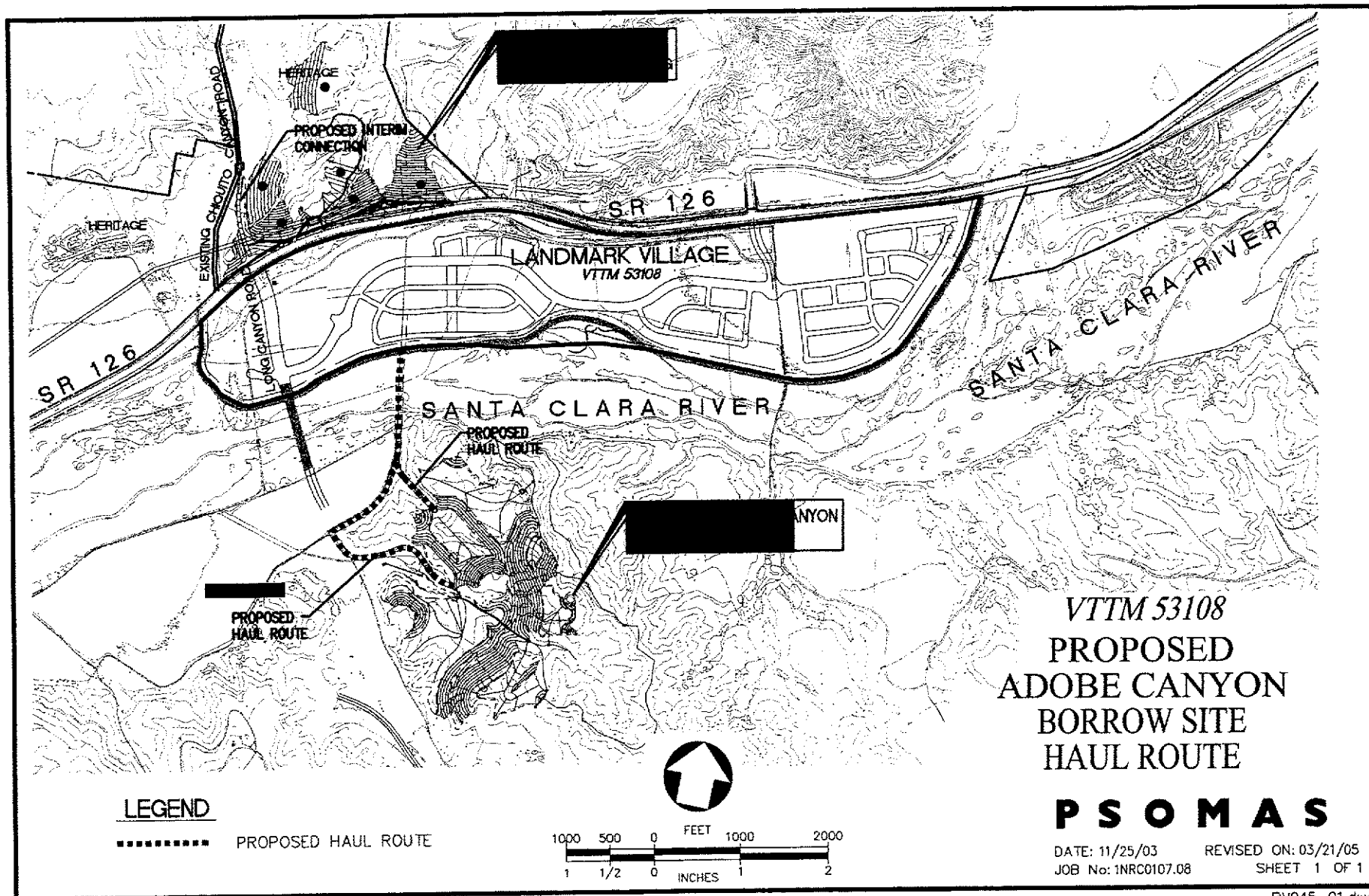


SOURCE: Impact Sciences, Inc. February 2006

FIGURE 1.0-33

Off-Site Improvements

DRAFT





Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead



February 22, 2007

Bruce W. McClendon FAICP
Director of Planning

TO: Esther L. Valadez, Chair
Harold V. Helsley, Vice Chair
Leslie G. Bellamy, Commissioner
Wayne Rew, Commissioner
Pat Modugno, Commissioner

FROM: Susan Tae, AICP, Section Head *ST*
Land Divisions Section

SUBJECT: "LANDMARK VILLAGE"
GENERAL/LOCAL/SPECIFIC PLAN AMENDMENT CASE NOS. 00-196-(5)
VESTING TENTATIVE TRACT MAP NO. 53108-(5)
CONDITIONAL USE PERMIT CASE NOS. 00-196-(5) AND 2005-01121-(5)
OAK TREE PERMIT CASE NO. 00-196-(5)
AGENDA ITEM NO. 6 a, b, c, d, e, f, g; FEBRUARY 28, 2007

PROJECT BACKGROUND

As you may recall, Landmark Village is the first subdivision proposal within the adopted Newhall Ranch Specific Plan ("Specific Plan"), and proposes to create a maximum of 1,444 dwelling units and 1,033,000 square feet of nonresidential uses as well as 45 acres of open space, including a 16-acre community park, trail system, and elementary school on 292.6 gross acres. The project is within the "Riverwood" Village of the Specific Plan, and located north of the Santa Clara River, south of State Route 126 ("SR-126"), east of the Ventura County boundary, and west of Interstate 5 Freeway. A Draft Environmental Impact Report ("EIR") was prepared for the project as a tiered document from the certified Specific Plan EIR, and concluded that impacts could not be mitigated to less than significant, include Biota, Visual Qualities, Noise, Air Quality, Solid Waste Disposal and Cumulative Agricultural Resources; Noise is the only impact factor for this project that was considered significant different than the certified Specific Plan EIR.

On January 31, 2007, after opening the public hearing and taking public testimony with concerns or in opposition to the project, the public hearing was continued to allow for additional time as requested by various agencies and individual citizens, to comment on the project and EIR. The public hearing was continued to February 28, 2007, and the public comment period for the EIR was continued to February 20, 2007 (total 90-day public comment period). An initial list of comments on the project was also provided by the Regional Planning Commission ("Commission") for the applicant to respond at the February public hearing.

PROJECT COMMENTS

The applicant has submitted a letter dated February 15, 2007, which provides responses to the comments provided at the January 31, 2007 public hearing (please see attached).

The following is the list of comments as well as a summary of the applicant's responses:

- **Potential incorporation of wireless technology within the project**

The applicant was requested to evaluate the potential for providing wireless technology within this project and the overall Newhall Ranch project. The applicant has responded that Newhall Land has an affiliation with SBC (AT&T) and that given the nature of constantly evolving technology, the project would be best able to incorporate highspeed wireless technology (e.g. WiFi or its future equivalent) in commercial and mixed use areas, and public spaces (e.g. parks, libraries, private community centers). Individual single-family homes would have various means for internet service.

- **Interim elementary school plan**

The Commission requested additional information for an interim school plan until enough students are generated from the project to open the elementary school. The applicant has responded that they have been working with the Castaic School District ("School District"), and anticipate that the first occupancies would arrive in mid to late 2009. The elementary school is anticipated to be open in fall of 2010, therefore leaving a nine to 12 month period where children from the project will be bussed to an existing school.

- **Community sustainability/smart growth**

The Commission also requested additional information regarding sustainability and smart growth elements within the Landmark Village project. The applicant has responded with various elements of the project that meet community sustainability and smart growth elements, including provision of jobs; provision of transit; open space, recreation and preservation of sensitive resource areas; reduction of impermeable surfaces; and water conservation and reuse.

The project is proposed in a Traditional Neighborhood Design, and proposes a mix of uses, including housing types, commercial, office and public facility uses within the project. The project is also designed to place residential near commercial services and/or public spaces, to promote walkability and more 'vibrant' neighborhoods.

Other components of sustainable development, including energy conservation, alternative energy sources, and 'green building.' The applicant has indicated that they are in the process of preparing a formal Sustainability Plan that will incorporate and in more detail, define energy conservation techniques, potential alternative energy sources and incorporation of green building designs within the entire Specific Plan area. This Sustainability Plan is currently being prepared, and will be completed before final approval of the project. The applicant indicated that they will be providing additional information during the February 28, 2007 continued hearing.

- **Ownership and maintenance of passive park**

The Commission requested clarification of ownership and maintenance of the passive park, which is located in the center of the project across "A" Street from the public park and elementary school. The applicant has stated that the passive park, which includes the interpretive trail and river lookout, will be maintained by the project's homeowners association but open to the public.

▪ **Potential revisions to elementary school and public community park design**

The Commission provided comments and direction regarding the design of the elementary school and public park site, specifically with respect to uses adjacent to SR-126 and the circulation and parking design for the school. At the Commission's direction, the applicant has worked with the School District and Los Angeles County Department of Parks and Recreation ("Parks and Recreation"), and has prepared a revised conceptual plan (attached) that depicts a nine-acre school site more centrally located, and the public park 'wrapped' around the school with roadway provided in between. By revising the original design of park and school side-by-side, this creates an additional buffer from SR-126-related impacts to the school and provides additional stacking space for the school.

A pedestrian bridge is also depicted crossing "A" Street, which may or may not be incorporated into the final project design. At this time, it is still being determined whether traffic signals will be required at the two intersections of the roads with "A" Street as they wrap around the school site. If traffic signals are to be installed at those locations, a separate pedestrian bridge will be not be necessary.

▪ **Waste-to-energy facility**

The Commission had requested additional information regarding a waste-to-energy incinerator facility and the feasibility of incorporating one within the project or vicinity. Newhall Land has met with the Los Angeles County Sanitation District ("Sanitation District"), and was informed that while an existing facility is being operated by the Sanitation District in the City of Commerce, a new waste-to-energy facility has not been proposed in California since 1990, and are no longer feasible considering policy changes and environmental regulations, including those from the Air Quality Management District.

▪ **Concerns regarding the Native American Tataviam tribe**

Testimony was taken on January 31, 2007 regarding the Cultural Resources Report prepared for the Draft EIR. The testifier objected to language within the report that described the Tataviam tribe as culturally extinct. The Tataviam tribe is not extinct, and the consultants have already personally apologized to the Tataviam tribe. Newhall Land has also worked with the Fernandeño Tataviam tribe on other projects in the Santa Clarita Valley, and will continue to work with them through the development of Newhall Ranch.

▪ **Trailhead and trail connections**

The Commission requested additional information regarding trails and in particular, the potential inclusion of a trailhead within the project. The applicant has agreed to work with Parks and Recreation for the siting of a trailhead location, and will likely be within the commercial area directly west of Long Canyon Road with direct access to the Santa Clara River Regional Trail.

Additional information was also requested regarding the trail connection across the river, and across SR-126. The main equestrian trail connection across SR-126 is located west of this project, within the adjacent pending subdivision known as Homestead (Vesting Tentative Tract Map No. 060678). The trail connection is proposed under a box culvert that is approximately 14 feet high, and at minimum height to travel through without dismounting a horse.

- **Cul-de-sacs along the western side of the project site**

The Commission requested clarification regarding the cul-de-sacs that were proposed on the west side of the project. The cul-de-sacs that were identified are in fact trail connections, and provide access from the development to the trails that run parallel to the Santa Clara River.

- **Setbacks from riparian area**

Setbacks or minimum distances between development and the Santa Clara River, are described in the Specific Plan. The Commission requested that the applicant clarify what was required, and what is being provided by the project. A letter has been provided by Impact Sciences, dated February 15, 2007 (attached) that discusses the riparian buffer and the various iterations through the public hearing process for the original Specific Plan. The Specific Plan was adopted with a minimum 100-foot buffer from top of river-side of the bank stabilization and project development, with provisions for a lesser buffer if riparian resources are still adequately protected. The tentative map and Draft EIR include a minimum 100-foot buffer, within which trails and open space/detention basins may be permitted, along the Santa Clara River Special Management Area. In one portion of the project, the riparian buffer is reduced from 100 feet to 70 feet, which is along Chiquito Canyon Road/Long Canyon Road, adjacent to SR-126 and heavily disturbed. A more detailed, written response will be provided in the Final EIR as part of response to comments.

- **Comments regarding studies from The Nature Conservancy and Santa Clarita Valley Preservation funds**

Testimony was given during the January 31, 2007 public hearing that studies from the Nature Conservancy and Santa Clarita Valley Preservation regarding funds to purchase property, should be evaluated. There are no additional comments regarding this comment at this time.

- **Perchlorate contamination and status of clean-up**

Ammonium perchlorate has been detected in groundwater basins underlying the Santa Clarita Valley, and testimony was received during the January 31, 2007 public hearing regarding this concern. The EIR consultant, Impact Sciences, has submitted a letter dated February 15, 2007 (attached) that states the Draft EIR includes discussion for remediation planning already underway for perchlorate contamination and restoration of the impacted well capacity. The Castaic Lake Water Agency together with local water purveyors, is proceeding with a two-prong perchlorate contamination remediation program (Interim Remedial Action Plan) with action program. Substantial progress has been made towards full implementation of the program. A more detailed, written response will be provided in the Final EIR as part of response to comments.

- **United Water Conservation District comments**

The Commission requested that additional information be provided from the United Water Conservation District ("United Water") regarding the project. A letter from United Water dated February 7, 2007, was received by staff, and included in this package. The letter states that United Water has reviewed the Draft EIR, and finds that it complies with the terms established in the settlement agreement.

▪ **Comments from the Audobon Society**

Detailed comments were received for the January 31, 2007 public hearing from the Audobon Society regarding the Draft EIR, and specifically the analysis and studies related to birds. The applicant was asked to respond, and Impact Sciences, the EIR consultant, has provided a letter dated February 15, 2007 (attached). In this letter, Impact Sciences responded with a discussion of the methodology used in the Draft EIR, and from the methodology focused on special-status species that have been observed, known to occur, or that have the potential based on habitat or known range. The birds cited by the Audobon Society as been omitted from the studies, for example the California condor and two owl species, are not considered special-status birds and therefore were not included. Prior to disturbance on the property, surveys would be required for native birds nesting. A more detailed, written response will be provided in the Final EIR as part of response to comments.

STAFF EVALUATION

Additional minor changes or corrections are required to the tentative map, which include those discussed during the public hearing process. These include:

- Minor grading elevation adjustments to match approved drainage concept;
- Inclusion of 11,000-square foot fire station within commercial area east of Long Canyon Road, south of "Y" Street, already analyzed in the Draft EIR, and location confirmed with Los Angeles County Fire Department, to be located outside river corridor buffer;
- If given direction by your Commission, change of school and park configuration
- Correct depiction of offsite improvements, including proposed water tank locations;
- Inclusion of five bus stops, including two pull-in areas, as confirmed with Santa Clarita Transit;
- More clear delineation of Metrolink right-of-way to be reserved by project; and
- Inclusion of trailhead location, based on further discussions with Parks and Recreation.

The updated tentative map will be circulated for Los Angeles County Subdivision Committee, with updated conditions and map presented to your Commission before final action on the project.

California Department of Fish and Game fees have also increased, effective January 1, 2007. Therefore, at this time the fees required for this project are \$2,500 plus a \$50 recording fee. As fees are in effect at time of paying, this number may also increase subject to changes by the State. No project is considered approved and/or vested without payment of these fees.

Additional correspondence received to time of writing, have been included for your Commission's consideration. The public comment period for the Draft EIR was continued from January 31, 2007 to February 20, 2007 (total 90 days) and no other public comments received after February 20, 2007 will be included in the response to comments portion of the Final EIR. However, the one EIR comment letter received after close of the public comment period, has been provided as part of comments on the project.

**LANDMARK VILLAGE
VESTING TENTATIVE TRACT MAP NO. 53108-(5)
February 28, 2007 RPC Public Hearing Cover Letter**

PAGE 6

Staff feels that the project, including the changes to the tentative map discussed above, is consistent with adopted Specific Plan (see Staff Evaluation section of the January 31, 2007 staff analysis). While the EIR concluded that not all impacts from Landmark Village can be mitigated to less than significant, all but one factor was already identified as part of the Specific Plan, and the project was approved with the Statement of Overriding Considerations.

STAFF RECOMMENDATION

The following recommendation is subject to change based on oral testimony or documentary evidence submitted during the public hearing process.

If the Regional Planning Commission agrees with staff's evaluation, staff recommends that the Commission close the public hearing; indicate its intent to approve Vesting Tentative Tract Map No. 53108, Conditional Use Permits 00-196 and 2005-01121, and Oak Tree Permit No. 00-196; indicate its intent to recommend approval of General, Local and Specific Plan Amendments 00-196 to the Board of Supervisors; and direct staff to prepare the final conditions, findings for approval and resolutions as well as Final EIR including response to comments and statement of overriding considerations.

The project will return at a future date for Commission final action on the Final EIR and the project findings and conditions.

Suggested Motion: "I move that the Regional Planning Commission close the public hearing; indicate its intent to approve Vesting Tentative Tract Map No. 53108, Conditional Use Permits 00-196 and 2005-01121, and Oak Tree Permit No. 00-196; indicate its intent to recommend approval of General, Local and Specific Plan Amendments 00-196 to the Board of Supervisors; and direct staff to prepare the final conditions, findings for approval and resolutions as well as Final EIR including response to comments and statement of overriding considerations."

SMT:st
02/22/07

NEWHALL LAND

A LENNAR/LNR COMPANY

February 15, 2007

Ms. Susan Tae, AICP
Los Angeles County Department of Regional Planning
320 West Temple Street
13th Floor
Los Angeles, CA 90012

RE: Newhall Land Responses to Commission Comments from the January 31, 2007
Landmark Village Public Hearing

Dear Ms. Tae:

This letter serves to address the comments directed to Newhall Land from the Regional Planning Commission at the January 31, 2007 public hearing on Landmark Village. The comments have been underlined with Newhall Land's responses directly below.

Potential Incorporation of Wireless Technology into Newhall Ranch

Newhall Land currently has an alliance with SBC for introduction of new technology into our communities. This could include the potential incorporation of wireless technology in portions of Newhall Ranch. The portions of Newhall Ranch that are being explored for this coverage would include commercial areas and public spaces (parks, library, and private community centers). It should be noted that each of the homes and commercial businesses within Newhall Ranch will incorporate the best available technology into their design.

Interim Elementary School Plan

Newhall Land is currently working with the Castaic School District on a plan that could include the initial bussing of Landmark generated elementary school students to an existing school within the District until such time that Landmark generates enough students to open the Landmark Village Elementary School. As indicated at the last Commission hearing, the first occupancies in Landmark are anticipated in mid to late 2009. The anticipated opening of the Landmark Village elementary school is fall 2010. In summary, there will likely be a 9-12 month period where elementary students generated in Landmark would be bussed to an existing school within the Castaic District.

THE NEWHALL LAND AND FARMING COMPANY

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Community Sustainability/Smart Growth

There are many different components that make a community sustainable or qualify it as a smart growth project. These include a proper mix of land use, provision of jobs, design for future transit uses in the plan, provision of open space and recreation, connectivity (trails), preservation of natural areas, the reduction of impermeable surfaces, water conservation and re-use, energy conservation - potentially including the use of alternative energies (solar, wind, cogeneration, etc.), and the incorporation of green building techniques.

As is evidenced below, Landmark Village, as with all of Newhall Ranch, incorporates the components of a sustainable or smart growth community. Furthermore, the Landmark Village Planning Booklet clearly identifies additional Traditional Neighborhood Design features that have been incorporated into Landmark. Components of a sustainable or smart growth community include:

- Mix of Land Uses – Landmark Village, along with the other villages in Newhall Ranch will include a broad range of housing types, including affordable housing, along with commercial, office and public facilities.
- Provision of Jobs – Landmark Village combined with the other villages of Newhall Ranch will create approximately 20,000 permanent jobs in the Santa Clarita Valley. Newhall Ranch is adjacent to Valencia Gateway, which presently provides 50,000 jobs. Additional development within Valencia Gateway will create an additional 30,000 jobs. When completed, the job centers in Newhall Ranch and Valencia will have resulted in the creation of approximately 100,000 jobs in the Santa Clarita Valley.
- Locating of Residential Uses in Close Proximity to Commercial Services/Public Spaces - Nearly 60% of the residential units in Newhall Ranch will be located within walking distance of village or commercial centers. This is clearly documented by the Landmark Village land plan. Residents within Landmark Village will be able to utilize paseos and/or the Santa Clara River Regional Trail to walk to commercial centers, private recreational facilities, the elementary school and a community park.
- Provision of Transit - Newhall Ranch, including Landmark Village, will be part of the Santa Clarita Transit system and will pay its fair share for transit service to the community. Transit improvements within the Ranch will include a park-and-ride lot, future transit station, transfer station, bus stops and preservation of light rail right-of-way. Landmark Village will include a total of five bus stops, a park-and-ride lot and the preservation of light rail right-of-way along SR 126.
- Open Space, Recreation and Preservation of Sensitive Resource Areas - Newhall Ranch, of which Landmark Village is a part, includes the preservation of the High Country, Salt Creek Corridor and the Santa Clara River – a total of nearly 6,700 acres. A total of three community parks (Landmark includes the first) and

up to ten neighborhood parks will be provided as part of Newhall Ranch. Finally, private recreation facilities will be provided throughout the entire Ranch providing additional recreational opportunities to residents.

- Hierarchy of Trails – Newhall Ranch will include over 50 miles of trails to encourage pedestrian mobility. Landmark Village includes a two-mile extension of the Santa Clara River trail, with direct connections to residential, commercial and park uses, and various paseos including the paseo running along “A” Street or the Landmark Village Spine Road.
- Reducing Impermeable Surfaces - Newhall Ranch, including Landmark Village, will utilize smaller street sections where possible, increased native landscape areas, and non-structural water quality treatment improvements.
- Water Conservation and Re-Use – Newhall Ranch, including Landmark Village, will utilize native, drought tolerant species, evapotranspiration controllers, and reclaimed water.

Other components associated with smart growth and sustainability include the use of energy conservation techniques or alternative energy sources and green building design. Newhall Land is working on a formal “Sustainability Plan” that will incorporate and define in more detail the use of energy conservation techniques, potential alternative energy sources and the incorporation of green building designs into the entire Newhall Ranch community. Newhall Land will provide additional detail on this subject at the Commission hearing on February 28.

Ownership and Maintenance of the Passive Park

Landmark Village includes a community park that would be utilized for both active and passive recreation. The passive area of the park is located south of the active portion of the park and directly south of the Spine Road (“A” Street). This passive portion of the park will be owned and maintained by the Homeowners Association and will be open to the public.

Potential Revisions to the Elementary School/Community Park Design

Per the Commission’s direction, Newhall Land has worked with the Castaic School District and County Parks to prepare a conceptual revised school/park plan. If supported by the Commission, we would work with both agencies to finalize this conceptual plan and incorporate it into the tract map. This plan is attached to this letter.

The Landmark Village tract map presently places the school and park side-by-side with the school being the easterly parcel and the park being the westerly parcel. The revised conceptual plan would move the school away from SR 126, utilizing the park as a buffer along SR 126 and the adjacent residential areas. This design also provides additional stacking space for dropping off and picking up students at the school.

Waste- To-Energy Facility

Pursuant to the Commission's direction, Newhall Land had several discussions with the Los Angeles County Sanitation District in an effort to gather more information on a waste-to-energy incinerator. The Sanitation District presently operates this type of facility in the City of Commerce. The facility was built in 1986 and provides power for up to 20,000 homes. The facility includes a large incinerator with a smoke stack approximately 150 feet tall. According to the Sanitation District, there has not been a waste-to-energy facility proposed in California since 1990. There are presently a total of three in the State.

Policy changes and environmental regulations have made it extremely difficult to build new waste-to-energy facilities within the State. State and Federal regulations no longer consider these facilities as a safe and environmentally sound alternative to landfills. Federal incentives, investment tax credits, favorable tax treatment and reasonable permitting no longer exist for these facilities. An example is that these facilities are no longer eligible for emission offset credits by the AQMD. Finally, several environmental organizations argue that these facilities not be considered as a renewable energy source.

As indicated earlier in the letter, we are exploring other potential alternative energy sources and believe those sources are more desirable than a waste-to-energy facility. These other sources could include cogeneration, wind and solar opportunities.

Landmark Village Cultural Resources Report

A speaker at the January 31 hearing cited a concern with language contained within the Landmark Village Cultural Resources Report prepared by W & S Consultants. This language indicates that the Tataviam Tribal community was culturally extinct. This statement is not accurate and W & S Consultants has personally apologized to the Tataviam Tribe, via a letter dated February 15, 2007, for this inaccurate statement. Additionally, W & S will amend the Landmark Village Cultural Resources Report to remove this language and replace it with language that reflects the existence of the Tataviam Tribe as documented by the Ethnographic Overview of the Angeles National Forest, Tataviam and San Gabriel Mountain Serrano Ethnohistory (2004).

Newhall Land has worked with the Fernandefio Tataviam Band of Mission Indians on projects within the City of Santa Clarita and in the Valencia Commerce Center. We value our relationship with them and will continue to consult and work with the Fernandefio Tataviam during the buildout of Newhall Ranch.


Trailhead

Newhall Land will work with the County of Los Angeles Department of Parks and Recreation on the locating of a trailhead within the Landmark Village project. This trailhead will likely be located within the commercial/mixed use area directly west of

Long Canyon Road and would be placed in a location with direct access to the Santa Clara River Regional Trail.

I want to thank you for your consideration of these responses. If you have any questions regarding this letter please feel free to contact me at (661) 255-4003. We look forward to the hearing on February 28, 2007.

Sincerely,

A handwritten signature in black ink, appearing to read 'Glenn Adamick', with a stylized flourish at the end.

Glenn Adamick
Vice President, Planning and Entitlements



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MEMORANDUM

Offices in Southern California, Bay Area, and Sacramento Valley

TO: Susan Tae and Daniel Fierros
FROM: Susan Tebo, Associate Principal *SALT*
DATE: February 15, 2007
SUBJECT: Landmark Village-Perchlorate Containment

Job. No. 32-092

At the January 31, 2007 Planning Commission Hearing various comments were raised by the Commission, one being associated with the issue of perchlorate containment.

At the direction of County Department of Regional Planning Staff, Impact Sciences prepared the following initial update on ammonium perchlorate containment in the Santa Clarita Valley.

The detection of ammonium perchlorate ("perchlorate") in the groundwater basin underlying the Santa Clarita Valley has raised concerns over groundwater contamination and the overall reliability of groundwater supplies. As discussed in both the Landmark Village Draft EIR and the 2005 Urban Water Management Plan ("UWMP"), planning for remediation of perchlorate and restoration of the impacted well capacity is substantially underway. While the remediation work is being completed, non-impacted wells can be relied upon for the quantities of water projected to be available from the groundwater basin during the time necessary to restore the remaining perchlorate-impacted wells. Castaic Lake Water Agency ("CLWA"), the local retail water purveyors, the Department of Toxic Substances Control ("DTSC"), and the U.S. Army Corps of Engineers ("Corps") continue to monitor and work closely on the remediation of the perchlorate-impacted wells. The following summarizes the status of perchlorate remediation and restoration of perchlorate-impacted groundwater supplies. The discussion illustrates that work toward the ultimate remediation of the perchlorate contamination, including reactivation of impacted groundwater supply wells, has progressed on several integrated fronts over the past several years.

As discussed in the Draft EIR, perchlorate was detected in four Saugus Formation wells near the former Whittaker-Bermite site in 1997. This site was formerly used to manufacture rocket fuel and other munitions and has been identified for many years as the source of perchlorate contamination. As a result, the four Saugus wells (Santa Clarita Water Division's wells Saugus 1 and 2, Newhall County Water District's well NC-11, and Valencia Water Company's well V-157) were removed from service. In 2002, perchlorate was detected in Santa Clarita Water Division's Stadium Well, located in the Alluvial aquifer, directly adjacent to the former Whittaker-Bermite site. This Alluvial well was removed from service as well. Since that time, CLWA and others have been conducting regular monitoring of active wells near the former Whittaker-Bermite site. In April 2005, that monitoring detected perchlorate in Valencia Water Company's well Q2, an Alluvial well. Valencia Water Company removed well Q2 from active service and pursued permitting and installation of wellhead treatment in order to return the well to water supply service. In October 2005, Valencia Water Company restored the pumping capacity of well Q2 with the start-up of wellhead treatment that effectively removes perchlorate from the water.

Valencia Water Company also permanently closed well V-157 and, in the fall of 2005, completed the construction of new Saugus well V-206, located in an area of the Saugus Formation not impacted by perchlorate. Valencia Water Company's well V-206 is operational and replaces the pumping capacity temporarily impacted by the detection of perchlorate at former well V-157. In summary, three Saugus wells (Saugus 1 and 2 and NC-11) and one Alluvial well (SCWD Stadium well) remain off-line due to perchlorate contamination. Perchlorate was recently detected in a new well operated by Newhall County Water District, but this detection is not a further indication of the continued spread of the perchlorate pollution. This perchlorate detection was at a "minimal" level (from undetectable to up to 1.9 parts per billion), well below the state-recommended limit of 6 parts per billion. This well is also located within 1,000 feet of another Saugus well that was capped due to perchlorate contamination since approximately 1997. However, the Corps has drilled new monitoring wells and commenced a focused study of the Saugus Formation near this latest detection. Results of this study and any subsequent recommended actions will be incorporated in the overall groundwater remedial investigation and removal actions submitted by Whittaker and currently under review by DTSC.

CLWA, in conjunction with local retail water purveyors, is proceeding with a two-prong perchlorate contamination program. The first prong is to protect non-impacted wells by pumping contaminated groundwater near the former Whittaker-Bermite site and treating this water thus preventing further migration within the aquifer and recovering costs incurred in responding to the perchlorate contamination. The second prong is to restore the production capacity and water supply from wells that have been temporarily closed due to the detection of perchlorate. CLWA's containment and water supply restoration program is well underway.

Specifically, CLWA developed an Interim Remedial Action Plan (IRAP) to address the groundwater perchlorate contamination and that action plan was approved by DTSC in January 2006. CLWA also completed CEQA review of its IRAP in the same time frame, and neither the IRAP nor the CEQA review has been subject to any judicial challenge. The final design for treatment facilities and pipelines is nearly complete; a groundbreaking ceremony occurred in August 2006; monitoring wells required for the project have been constructed; the major construction work is scheduled to be put out for bid in February 2007, with construction on this stage to be underway by mid-2007. Funding to cover all remedial work has been secured by a settlement between Whittaker and its insurance carriers, with several millions of dollars currently held in escrow. A settlement of claims by CLWA and other water purveyors is pending, and is expected to result in the assignment of the escrowed funds for implementation of CLWA's approved IRAP. In summary, the perchlorate containment program has made substantial progress toward full implementation.

The quality of the groundwater available from the Alluvial aquifer near the Landmark Village project site has been tested. Results from laboratory testing conducted for Valencia Water Company wells expected to serve the project site are provided in the Draft EIR. The wells expected to be used are already approved by the Department of Health Services for use, and are located just northeast of the Newhall Ranch Specific Plan site in the Valencia Commerce Center. Laboratory testing indicates that all constituents tested were at acceptable levels for drinking water under Title 22. Tests conducted for perchlorate indicated "non-detect." Valencia Water Company also investigated the future risk of perchlorate contamination on its new wells. Based on a technical report prepared by Luhdorff & Scalmanini (groundwater consultants), it was found that, given that the groundwater resources from the Alluvial aquifer for Landmark Village would be produced from wells located along Castaic Creek and over four miles west of the area known to be perchlorate-contaminated (*i.e.*, the former Whittaker-Bermite site), the groundwater supplies for the project are not considered at risk. In any event, there are now established wellhead treatment facilities that effectively remove perchlorate and restore well

capacity without the need for a brine line. Valencia Water Company's well Q2 illustrates the effectiveness of such facilities.

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MEMORANDUM

Offices in Southern California, Bay Area, and Sacramento Valley

TO: Susan Tae and Daniel Fierros **Job. No. 32-092**
FROM: Susan Tebo, Associate Principal *ST*
DATE: February 15, 2007
SUBJECT: Landmark Village-Comments Submitted by the Audubon
California

At the January 31, 2007 Planning Commission Hearing various comments were raised by the Commission, one being a comment regarding the letter dated January 19, 2007 submitted by Audubon California in response to the Landmark Village Draft EIR.

At the direction of County Department of Regional Planning Staff, Impact Sciences prepared the following initial response to the Audubon letter. A more detailed response will be provided as part of the formal "Responses to Comments" which will be included in a Final Draft EIR. All other comment letters on Landmark Village will also be responded to as part of the above process.

In its letter, Audubon states that the Landmark Village EIR's analysis of biological resources, specifically sensitive bird species, is not adequate for: (a) not analyzing all sensitive bird species in the project area; (b) not conducting adequate bird surveys or not performing enough surveys; (c) not accurately portraying the status of various sensitive bird species; and (d) not mitigating for such impacts.

The methodology used in the Landmark Village EIR for assessing the project's environmental impacts on biological resources, including special-status species, consisted of:

- A review of the literature applicable to the biological resources in the project area. In addition, a review was conducted of recent and historical reports and surveys documenting the existence of sensitive habitat, plant, animal, and bird resources on Newhall Ranch, including the Landmark Village project site and surrounding areas.
- A review and compilation of recorded occurrences of federal and state special-status species in the project vicinity was conducted, utilizing the most recent versions of the Department of Fish and Game's California Natural Diversity Data Base (CNDDDB) and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants for the project site and the surrounding areas.
- Field surveys were then conducted of the project site and surrounding areas by biologists qualified and/or permitted to conduct such surveys. Habitat and species observations were noted, photographed, and mapped. Specific information concerning any special-status species observed on-site was recorded, and the surveys were conducted in accordance with published resource agency survey protocols where they exist, or consistent with accepted survey methodologies for a particular species where published protocols did not exist.

The literature review, database search, and field surveys identified a total of 26 bird species observed, having the potential to occur, not expected to occur, or rarely occurring on the project site. Of these 26 bird species, nine were observed on the project site during the 14 years of bird surveys that were conducted annually on Newhall Ranch, including on the Landmark Village site and its immediate vicinity, since 1993 (*see*, Draft EIR, Tables 4.4-3, 4.4-5, 4.4-6, and 4.4-7).

Based on the above methodology, the Draft EIR focused on special-status species that have been observed, that are known to occur, or that have the potential for occurring in the project area, because the site is included in the breeding or wintering range of the species, or because suitable habitat exists on the project site or its vicinity. Such is the case for the species listed in Tables 4.4-5, 4.4-6, and 4.4-7 of the Draft EIR. The Draft EIR then analyzed the potential impacts on all of these species, including special-status bird species, and identified measures to mitigate those impacts considered significant under CEQA. For example, Mitigation Measure LV-4.8-8 of the Draft EIR includes provisions for pre-grading and pre-construction surveys to be conducted to locate active nests of bird species that potentially would be impacted by grading/construction. If such nests are found, measures are included that will ensure that adult birds, young, or eggs will not be impacted. Therefore, the methodology utilized in the Draft EIR is sufficient to identify special-status bird species expected to occur in the project area, and to assess and mitigate impacts on such species.

Nonetheless, Audubon states, for example, that the California condor and two owl species were not identified. The literature review, database search, and field surveys conducted over the past several years on or near the project site indicate that neither the California condor nor the two owl species have been observed on the project site. This is because the project site contains no roosting or nesting habitat for these species, and very little, if any, suitable foraging habitat. Consequently, the species are not expected to occur on-site and no adverse impacts to the species are expected to occur. However, the species will be added to the Draft EIR in Table 4.4-7 as special-status species not expected to occur or rarely occurring on the project site.

Audubon also states, for example, that eight species listed by Audubon are not addressed in the Draft EIR (*e.g.*, ferruginous hawk, long-billed curlew, purple martin, *etc.*). The Draft EIR relied on the most recent version of the Department of Fish and Game's List of Special Animals, dated February 2006, as the most credible source of special-status species in California. Of the eight species listed by Audubon, only three (ferruginous hawk, long-billed curlew, purple martin) are considered of "special concern" by the Department of Fish and Game. As to the ferruginous hawk, in fact the hawk is listed in Table 4.4-7 of the Draft EIR, and is acknowledged as an "infrequent migrant" to the region and a species that potentially could forage or otherwise occur on the project site in grasslands, agricultural fields, and open scrublands. As such, the ferruginous hawk has been appropriately considered. As to the long-billed curlew, it only breeds in the northeastern portion of the state, and, therefore, the life-cycle stage that is considered sensitive would not be expected to occur on the project site. As to the purple martin, very few records exist of purple martins breeding in Los Angeles County. As noted by Audubon, most of the breeding colonies exist to the north in the Tehachapi Mountains. Nonetheless, Table 4.4-7 (species not expected or rarely occurring on the site) will be revised to add the long-billed curlew and purple martin to the EIR.

The remaining bird species listed by Audubon are not considered special-status bird species by federal or state wildlife agencies. Because of the lack of a recognized sensitivity status, any impacts to such species, should they occur on the site, would not be considered significant under CEQA. In any event, mitigation in the Draft EIR includes pre-grading and pre-construction surveys for all native bird species

that potentially would be impacted by grading/construction. If any such nests are found, measures are in place to ensure protection of the species.

Audubon further states, for example, that the surveys which were conducted for the Coastal California gnatcatcher were not completed according to protocol. Audubon also states that the project will result in the removal of 1,820 acres of coastal sage scrub (the habitat of the gnatcatcher), and criticizes the adequacy of the completed gnatcatcher surveys. In fact, only 271 acres of coastal sage scrub occur on the project site (as opposed to the 1,820 acres stated by Audubon). In addition, surveys for gnatcatcher were conducted following U.S. Fish and Wildlife Service Guidelines for protocol surveys for non-NCCP (Natural Community Conservation Plan) areas, and the completed gnatcatcher surveys were adequate for impact assessment purposes.

Audubon also calls for winter, nighttime, and other special surveys for various bird species. In response, CEQA does not require that a lead agency require that every recommended test, report, or survey be performed in order to adequately evaluate the impacts of a proposed project. In addition, in this case additional surveys for each of Audubon's referenced species are neither practical nor useful, because such surveys do not establish, with a high degree of confidence, the presence or absence of such species on the project site (particularly for elusive species, such as nocturnal owls). Under such circumstances, the better practice is to follow the methodology used in the Draft EIR. Specifically, based on the literature review, database search, and field surveys, the Draft EIR identified those special-status species that were observed, or that potentially would be observed on the site, because of the breeding or wintering range of the species, or because of the suitability of the habitat on the project site or in its vicinity. The Draft EIR then conducted an impact assessment on all sensitive biological resources, including special-status bird species, and adopted feasible mitigation, including pre-grading and pre-construction bird surveys. In addition, the overall net loss of sensitive habitat on the Newhall Ranch site, including Landmark Village, already has been identified as a significant unavoidable impact at the Specific Plan level, and the Board of Supervisors already took those impacts into account when the approving Newhall Ranch Specific Plan and the significant overriding public benefits associated with the Newhall Ranch community.

Finally, Audubon questions the mitigation measures and associated conservation strategies that will minimize impacts to sensitive biological resources within Newhall Ranch, including the Landmark Village site. As described in both the previously certified Newhall Ranch Specific Plan Program EIR and the Landmark Village EIR, essentially the entire Santa Clara River corridor within Newhall Ranch, including the southern boundary of the Landmark Village site, will be preserved. The diversity of the various riparian and aquatic vegetation communities in the Santa Clara River corridor provides habitat for a variety of wildlife species, including a number of special-status bird species. Newhall Ranch, including the Landmark Village project site, also will maintain a riparian resource setback or buffer that runs the length of the Santa Clara River. The Board of Supervisors already has determined that the riparian buffer is sufficient to maintain the functions and values of the adjacent riparian habitat, and to protect the diversity of riparian-associated species occurring within this area.

Finally, the adopted Specific Plan's Resource Management Plan provides for the dedication, ownership, and management of the Open Area, totaling approximately 1,010 acres, and the two Specific Plan Special Management Areas (SMAs), namely the approximately 1,000 acre River Corridor SMA/SEA 23, and the 4,184-acre High Country SMA/SEA 20. The two SMA/SEA areas preserve regionally significant biological and other natural resources within Newhall Ranch, including the Landmark Village site. In addition, as part of the approval of the Specific Plan in May 2003, the Board of Supervisors imposed an off-site condition, requiring the applicant to dedicate to the public, the

remaining 1,518-acre portion of the Salt Creek watershed in Ventura County, adjacent to the Specific Plan site. These large areas of sensitive native habitats are generally associated with the natural drainages and major landforms within the Specific Plan site. They also provide connectivity with regional open space adjacent to the Specific Plan site. The over 6,700 acres of land to be preserved and protected (*i.e.*, High County, River Corridor, Salt Creek) provide significant on-site and adjacent mitigation and management opportunities to reduce impacts to sensitive biological resources, including special-status bird species.

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MEMORANDUM

Offices in Southern California, Bay Area, and Sacramento Valley

TO: Susan Tae and Daniel Fierros
FROM: Susan Tebo, Associate Principal *ST*
DATE: February 15, 2007
SUBJECT: Landmark Village-Setback from Riparian Resources

Job. No. 32-092

At the direction of Regional Planning staff, Impact Sciences is providing the following response to testimony received at the January 31, 2007 Regional Planning Commission public hearing. The testimony related to the adequacy of the previously approved riparian buffer along the Santa Clara River within the Newhall Ranch Specific Plan boundaries. More detailed information will be provided in the Final Draft Landmark Village EIR as part of the responses to comments.

The Santa Clara River riparian buffer was heavily debated during the Specific Plan and environmental documentation approval process. It was discussed in detail in at least 30 comments, which were the subject of thoroughly prepared written responses. Furthermore, prior to final Specific Plan approval, the Board of Supervisors required that the Specific Plan design be revised to incorporate the 100-foot wide buffer to protect riparian habitat and special-status species within the River Corridor SMA/SEA 23 boundaries. This finding was arrived at after evaluating the potential impacts of proposed land uses along the entire length of the River, coupled with the existing habitat protection and enhancement provisions contained in the Specific Plan's Resource Management Plan and Design Guidelines. The overall buffer area is comprised of several different components: (a) the Salt Creek wildlife corridor connection and the High Country half mile wide buffer at the west end of the Specific Plan on the south side of the river; (b) native upland habitats in the Open Area along the south side of the river; (c) disturbed areas within the River corridor that will be restored or enhanced as riparian habitat; (d) buried bank stabilization that will be revegetated with native riparian and upland plant species; and (e) landscaped open space areas such as community parks, the Regional River Trail and community trails.

In approving the Specific Plan and Conditional Use Permit 94-087, the Board of Supervisors found that the Specific Plan retained sufficient natural vegetative cover and open space to buffer critical resources in the River Corridor SMA/SEA 23 from the development shown in the Specific Plan. The Board of Supervisors further found that the Specific Plan incorporated an extensive buffer area to protect critical resources within the Santa Clara River. The Specific Plan's adopted Resource Management Plan requires a minimum 100-foot wide buffer adjacent to the Santa Clara River between the top river-side of the bank stabilization and development within certain specified land use designations (including those on the Landmark Village project site) unless, through Planning Director review, in consultation with the County staff biologist, it is determined that a lesser buffer would adequately protect the riparian resources within the River Corridor SMA/SEA 23, or that a 100-foot wide buffer is infeasible for physical infrastructure planning. The Specific Plan's Resource Management Plan provides standards by which biological resources will be managed during construction and thereafter for the life of the community. It contains: (a) provisions for restoration and enhancement of disturbed areas such as agricultural fields; (b) restrictions on pedestrian and vehicular access to the river corridor; (c) design

standards for transition areas between development and the river; (d) conveyance of conservation easements; and (e) preparation of a financial plan for the long term management of the riparian resources by the Center for Natural Lands Management. In addition, the Specific Plan's Design Guidelines contain provisions restricting the manner in which developed areas relate to the River Corridor, including site planning, fencing, landscape design, grading and lighting. All of these measures were previously found by the Board of Supervisors to satisfy the General Plan SEA design compatibility criteria as means to protect sensitive habitat and special-status species in and adjacent to the Santa Clara River.

Page 4.4-61 of the Landmark Village Draft EIR states that a minimum 100-foot wide buffer is present along the vast majority of the Landmark Village project; this buffer is reduced to a 70-foot width in a limited area along Chiquito Canyon Creek on the project's westerly boundary -- an area that is adjacent to SR-126 and heavily disturbed. Based on the site-specific analysis conducted in the Landmark Village Draft EIR, the Landmark Village buffer is consistent with the approved Specific Plan.